

## INSIDE DOPE

by GEORGE F. TAUBENECK

Stories of the Week  
Add Children Stories  
Gags of the Week  
Corn of the Week  
Add Salesman Stories  
Wisdom of the Week  
Cute Trick of the Week  
Sports Note  
Brooklyn Celebrity Notes  
Case History in Economics  
Westinghouse Launches  
Discussion Program  
Forum and Againstum

## Stories of the Week

Friend of ours, who was involved in a slight collision on the main street of a West Virginia town, swears that a policeman asked him: "Who hit the other car first?"

Because mailing lists always contain "deadwood," seldom are up-to-date, and never are qualified properly, large numbers of people who receive free-circulation advertising are poor prospects for whatever appeal is involved.

Example: Father O'Brien was solicited by mail for a donation to the Methodist Church Building Fund. To his good friend the Methodist preacher who signed this promotion piece, Father O'Brien wittied:

"Naturally I can't contribute to the building of a new Methodist church. However, I am enclosing five dollars which you can apply to the demolishing of your old church."

Gathered around the big Director's Table, department heads were sounding off about next year's budget.

"Why should we spend so much for advertising," demanded one Little Mind, "when people will be lining up to buy the product we make?"

"Yes, they'll line up to buy it," agreed an Old-Timer, "but in whose line?"

## Add Children Stories

Finding a baby-sitter for Junior was no problem, because both grandmothers lavished affection on the bonnie boy. Mommie was perplexed when he vociferously demonstrated a preference.

"But, Junior," she cajoled, "it's Grandmother Atlee's turn to take care of you."

"Na-ah!" protested the candid child. "I don't wanna go to her house. She doesn't mind like Grandma Ferguson."

## Gags of the Week

"The early bird gets the worm—and he's welcome to it."  
—Mississippi Spectator

"We might call a bank a place where they lend you an umbrella in fair weather but ask for it back again when it starts to rain."  
—Thermo Topics

## Corn of the Week

"What did Paul Revere say at the end of his famous ride?" quizzed a fifth-grade teacher.

A bright boy in the class hadn't studied his history lesson carefully, but he drew upon his lively imagination, to wit:  
"Whoa!"

Definitions of Washington news sources:

Reliable Source—the guy you just met.

Informed Source—the guy who told the guy you just met.

Unimpeachable Source—the guy who started the rumor originally.

## Add Salesman Stories

"Straight life is what you want, isn't it?" pestered an insurance agent.

"Um, s'pose so. Straight life is best, they tell me. However, I would relish some excitement occasionally."

To men and women with ambitions to star on the stage or in the profession of salesmanship, Mrs. Jessica Landau, talent scout for Universal, is the one to watch.



## AIR CONDITIONING &amp; REFRIGERATION News

Vol. 63, No. 14, Serial No. 1168

August 6, 1951

Subscription Price, \$5 Per Year

Reentered as second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879.  
Trade Mark Registered U. S. Patent Office. Copyright 1951, by Business News Publishing Co.

## How Controls Law Affects Business

## CMP Not Altered; Mfrs. Say Details Snarl Its Operation

DETROIT—The new Defense Production Act, just made law, will have little or no effect upon the system of allocation of materials under the Controlled Materials Plan, which in turn effectively controls the production of consumer durable goods.

In fact, the National Production Authority has just issued an order reducing the amount of steel and aluminum that will be available for civilian goods in the fourth quarter of this year (see story elsewhere in this issue).

As to how well the CMP is working, there is considerable question. A great many manufacturers who have to get steel, aluminum, and copper under the plan condemn and even curse it, pointing to foul-ups and delays even for items which the Defense Administration labels highly essential.

A minority of manufacturers say they are satisfied that the plan gives them the materials that they need. The big steel and aluminum firms are mostly silent, although Irving S. Olds, chairman of the U. S. Steel Corp., has stated that in view of the uncertainty over just how much steel will be needed for the defense program, CMP is probably the best possible method of distributing steel among users.

Some NPA officials say off the record that industry will have to "endure" the problems of getting CMP.

(Concluded on Back Page, Column 1)

## Steel, Aluminum Quotas Reduced for 4th Quarter

WASHINGTON, D. C.—Manufacturers of consumer durable goods are not going to get quite as much steel, copper, and aluminum during the fourth quarter as they are getting during the third quarter, the Defense Production Administration indicated recently.

The reduction will bring steel use down to about 65% of base period as compared to the 70% now permitted.

During the fourth quarter, these manufacturers will be allotted the following amounts of the basic

(Concluded on Back Page, Column 5)

## Air Cooling In Florida Draws Summer Crowd, Too

JACKSONVILLE, Fla.—"It is air conditioning that has helped make busy summers possible in Florida," says a reporter for the New York Times in surveying summer activity in the winter vacation state.

"Florida is now half through the second successive year of intensive promotion of its possibilities for summer vacations, and the highways are busy and the streets and swimming pools and the hotels are alive with guests from the North," he reports.

This has been brought about, he says, by "air conditioning and the realization by hotel owners that once having covered their mortgage payments, taxes, and operating costs, and gained a profit during an eight or 10-week winter season, they could proceed to operate their plants during the summer at reduced rates, and garner extra income."

## 15% Down, 18 Mos. Are Terms Under New Law

WASHINGTON, D. C.—When President Truman signed the Defense Production Act extension on July 31, he immediately put into effect easier credit terms on refrigerators, major appliances, and room air conditioners.

Under Congressional direction, the Federal Reserve Board issued amendment 4 to Regulation W, reducing down payment requirements from 25% to 15%, extending terms from 15 to 18 months, and permitting trade-ins to be considered part of the down payment.

Products affected are refrigerators, freezers, television and radio sets, stoves and ranges, dishwashers, ironers, washing and drying machines, room unit air conditioners, mechanical dehumidifiers, sewing machines, and suction cleaners.

The amendment also eliminates

(Concluded on Page 4, Column 1)

## Expect 200 Exhibitors At All-Industry Show

WASHINGTON, D. C.—It is now predicted by L. C. McKesson, chairman of the Exposition Committee, that more than 200 manufacturers of refrigeration and air conditioning equipment will exhibit at the 7th All-Industry Refrigeration and Air Conditioning Exposition which is being held Nov. 5 to 8 at Navy Pier in Chicago.

The All-Industry Show is sponsored by the Refrigeration Equipment Manufacturers Association and is a national trade show with admission free, by registration, to anyone identified in any way with the refrigeration or air conditioning industry.

The Show Committee advises that anyone planning to attend the All-Industry Exposition should make hotel reservations as far in advance as possible, as there will be at least one other large convention held in Chicago at the same time.

The Exposition will be open to visitors during the following hours:

Mon., Nov. 5—2 p.m. to 10 p.m.  
Tues., Nov. 6—10 a.m. to 6 p.m.  
Wed., Nov. 7—12 noon to 10 p.m.  
Thurs., Nov. 8—10 a.m. to 4 p.m.

Questions about the Exposition, exhibit space, and hotel reservations can be secured by writing to Show Director, 7th All-Industry Refrigeration and Air Conditioning Exposition, 1346 Connecticut Ave., Washington 6, D. C.

## May NEMA Freezer Sales 53% over '50

NEW YORK CITY—Home and farm freezer sales during May zoomed 53% ahead of the same month last year, reports from 24 firms to the National Electrical Manufacturers Association indicated recently.

These sales, totaling 56,623 units, were 12% below April, but for the past four years, May sales have always been below April.

Sales for the first five months of

(Concluded on Page 21, Column 2)

## New Price Controls Permit More Cost Adjustments--Up!

WASHINGTON, D. C.—Higher prices for practically everything appear to be in the offing as a result of the new "price control" formula handed to the Office of Price Stabilization by Congress on Aug. 1.

Manufacturers are given the right to include all cost increases incurred prior to July 26 in figuring their ceilings. The Congressional definition of "costs" is much more liberal than the one OPS has been using.

In addition, wholesalers and retailers are permitted to apply the "customary percentage margins" of their class of trade in use between May 24 and June 24, 1950.

However, the new law says that the manufacturers will have to apply for any adjustments in their ceilings. But, if increased costs are proved, the OPS will have to adjust their ceilings to reflect these costs.

The only toughening of the price control law was in the enforcement provisions. The \$10,000 limit on penalties for overcharges was removed, violators are not permitted to "cost" their illegal overpayments for tax purposes, injunctions can be obtained to restrain price violators, and ceiling violators doing business with the government cannot pass illegal overpayments on to the government as part of contract costs.

The relaxed price control law says that the price ceiling cannot be lower than the highest price received for a commodity or service between Jan. 1 and June 24, 1950, plus adjustments for any cost increases between that high point and July 26, 1951.

"Costs" are defined as including "material, indirect and direct labor, factory, selling, advertising, office and all other production, distribution, transportation, and administration costs" that are not "unreasonable and excessive."

(Concluded on Back Page, Column 4)

## NPA Water Div. To Study Supplies, Defense Needs

WASHINGTON, D. C.—To make effective use of the nation's water resources so that the needs of defense plants, military reservations, and civilian population are adequately met, the National Production Authority has announced the creation of the Water Resources Division and appointment of Harvey S. Howe of West Orange, N. J. as its director.

"Water is so basic a necessity that it is paradoxical how often it is overlooked in industrial planning," NPA officials said.

"NPA is setting up a small control group of technical men whose job it will be to plan for national needs in the fields of industrial, public, and domestic water and disposal of waste and sewage."

In explaining the work of the Water Resources Division, Howe said that planners of defense plants will check with the division on the availability and quality of water in areas selected for plant sites.

Water quantity needs vary not only with the industrial process involved, but also with the type of plant construction, such as whether air conditioned or open-windowed.

Responsibility of the Water Resources Division will include (1)

(Concluded on Back Page, Column 5)

## IT &amp; T Purchases Coolerator; Few Changes Seen

## Big Corporation Plans To Go Along with Present Distribution Setup

DULUTH, Minn.—International Telephone & Telegraph Corp. has entered the refrigerator and major appliance field through the purchase of the Coolerator Co. here.

I. T. & T. purchased Coolerator from the Gibson Refrigerator Co., and Fred Wilson, president of the Capehart-Farnsworth Co., an I. T. & T. subsidiary, has assumed presidency of the company, which produces household electric refrigerators, ranges, and home freezers.

In answer to questions put by AIR CONDITIONING & REFRIGERATION NEWS, Wilson said that "no plans are being made for any changes in the Coolerator distributor-dealer setup," and that there is no thought now of "any integration with Capehart-Farnsworth distributors, although some Capehart-Farnsworth distributors are also Coolerator distributors."

Wilson said also that there are no plans for moving production facilities, that "Coolerator will remain a Duluth enterprise." E. W. Skowbo, operations vice president, and G. L. Rees, vice president in charge of sales, will continue on at Coolerator. L. W. Hamper, a Gibson executive who was formerly president of Coolerator, and C. J. Gibson, Sr. and C. J. Gibson, Jr., have resigned as officers and directors of the company.

The Coolerator name will be retained and there was some hint of an expansion of the company's line of products and of its production facilities.

The Coolerator Co. was founded in 1934 as a manufacturer of a "modern" line of ice refrigerators. Shortly before the start of World War II it began turning out electric refrigerators. In 1948 it was sold to the Gibson Refrigerator Co. and freezer and electric range lines were added.

## NBBB Has Plan To Solve Door-to-Door Selling Ban

NEW YORK CITY—A five-point program intended to enable the direct selling industry to "survive the blow dealt it by the Supreme Court" has been suggested by the National Better Business Bureau.

The high court recently ruled, in effect, that cities may pass local ordinances prohibiting house-to-house canvassing and selling. The court upheld an Alexandria, La., ordinance which requires door-to-door salesmen to have an invitation from a householder before a solicitation can lawfully be made.

The NBBB said direct selling will survive the Supreme Court "blow" only "if it proves to the public through its performance that it merits public confidence."

"It cannot accomplish this, in the

(Concluded on Page 4, Column 2)

## High-Powered Promotion Gives Meat for Month With Refrigerator

ROCHESTER, N.Y.—A local appliance distributor and food chain joined hands in a high-powered summer refrigerator promotion in which a month's supply of choice meats was offered free with each purchase of a refrigerator.

Beaucare, Inc., the distributor, and Wegman's food markets put on the deal in which the food chain supplied meat requirements for over a month, based on the needs of an average family.

The customer was given the choice of receiving the entire meat allotment at once, or of ordering items as needed. The month's supply of meat included: Shoulder roasts of beef, standing rib roasts of beef, butt-half cooked ham, sirloin steaks, center cut pork chops, loin lamb chops, veal cutlets, broilers and frying chickens, sliced bacon, Texas or Pork hots, and ground beef.



## Westinghouse To Televis NCAA Football Games

NEW YORK CITY—Westinghouse Electric Corp. will sponsor the televising of the National Collegiate Athletic Association football games this fall.

Announcement of the 10-week football television program, covering the period from Sept. 22 through Nov. 24, was made jointly by Admiral Thomas J. Hamilton, chairman of the television committee of the National Collegiate Athletic Association, and by J. M. McKibbin, vice president in charge of consumer products, for Westinghouse.

Selected games of some 40 college teams will be covered either by the interconnected television network, by regional networks, or by local stations.

Negotiations with respect to the Pacific Coast and other areas not on the interconnected network are to be initiated soon by Westinghouse. Stations in approximately 50 cities will carry the contests.

Each section of the country which can be reached will view seven top-flight games during the season. Three Saturdays are to be "blackout" in each region as part of intensive N.C.A.A. research to determine the effect of television on game-going habits of football enthusiasts.

Announcement of specific games to be televised cannot be made until negotiations with the individual colleges concerned have been completed. Westinghouse will conduct these negotiations with the home team of each of the games tentatively scheduled. The games to be televised will

be selected by the sponsor within the framework of N.C.A.A. rules.

It is expected that most of the major teams representing the East, Midwest, South, and possibly the far West will be included on the Westinghouse television schedule. No college team will appear more than twice during the 10-week period, however, since N.C.A.A. rules stipulate that the contests of each school to be telecast must be limited to one home game and one game away.

N.C.A.A. has been increasingly concerned over the effect of television on attendance at games.

Accordingly, the N.C.A.A. voted to conduct an experimental television program for the 1951 season and appointed a committee to set up rules for televising a limited number of games this year.

The National Opinion Research Center of the University of Chicago has been engaged by N.C.A.A. to study the effects of television.

## Rebuilders Are Not Mfrs. Under Price Law

WASHINGTON, D. C.—The Office of Price Stabilization has amended its general manufacturers' order (CPR 2) to make it clear that the definition of manufacturer does not include a person who merely rebuilds, reconditions, renovates, renews, or otherwise restores a used commodity.

The question needing clarification had arisen in the case of engine rebuilders and others, OPS said. Neither CPR 22 nor CPR 30, the machinery order, applies to rebuilders and reconditioners.

## Wirth Heads Wholesale Sales at Kinetic Division

WILMINGTON, Del.—Promotion of Charles Wirth III, manager of the eastern district office of Du Pont's Petroleum Chemicals division, to the position of manager of wholesale sales in the Kinetic Chemicals division of the company's organic chemicals department has been announced recently.

Wirth's shift from New York City to Kinetic in Wilmington came as the division assumed responsibility on July 26 for wholesale sales of Du Pont's "Freon" fluorinated hydrocarbons, used as refrigerants and aerosol propellants, which previously were handled by the company's polychemicals department.

Wirth started with Du Pont as a technical demonstrator in 1939, served in the army during three years of World War II, returned to the company in 1945, and two years later was made manager of the mid-continent district office for petroleum chemicals sales in Tulsa, Okla. He was made eastern district manager last year.

## Triton Hotel Installs 65 Window-Type Room Coolers

MIAMI BEACH, Fla.—Sixty-five Mitchell room air conditioners were recently installed in the Triton Hotel which is located at 27th and Collins Ave. here.

All of the window-type units were of ½-ton capacity.

## Complete Air Conditioning Story

### Bonneville Uses Cakes of Ice, Bottles of Water, And Container of Dirt To Dramatize Features

DETROIT—"Dealers and their salesmen should be trained to tell the complete air conditioning story to close room air conditioner sales," declared E. A. Bonneville, general sales manager of Remington Air Conditioning Co., speaking before the sales organization of Temp-Matic Wholesalers, Inc. here recently.

According to Bonneville, the fact that a room air conditioner will cool one or more rooms often fails to justify a cost of from \$300 to \$800 in the mind of the prospect. He has observed that few sales of room conditioners are lost "to competition," but most of them are lost because the salesman does not tell a complete story.

Bonneville has observed that a prospect often looks at a room air conditioner and says, "What—three hundred bucks for just that little unit? Why—my refrigerator cost less and its bigger and better looking."

To meet this situation Bonneville is just completing a nationwide tour, and has visited Mexico, instructing distributor personnel in how to train dealers and dealer's salesmen in the most effective presentation of the room air conditioner story.

### Cooling Capacity

Salesmen can dramatize the cooling capacity of a room air conditioner for the prospect by relating its capacity to melting ice. For example, a ¼-hp. conditioner has a cooling effect equal to that obtained by melting 1,500 lbs. of ice. At this point in the talk the prospect is asked to visualize fifteen 100-lb. cakes of ice—all piled up. (In putting the story across to distributor's personnel Bonneville often puts 15 large cakes of ice on the platform.)

Now then, he continues, if you had to buy all this ice and melt it, to cool your home or office, it would cost about 60 cents a cake, or \$9 a day for ice. The cost for one month of cool comfort would be \$270 and that's a lot of money. On the other hand the room air conditioner will create this cooling effect day after day, with low cost for electricity.

### Dehumidifying Story

Bonneville now turns to the dehumidifying story, to further build value in the prospect's mind. "This room air conditioner," he relates, "will take 33 quarts of water out of the air every day—that's over 1,000 quarts of water a month." (In sales meetings Bonneville has 33 quart milk bottles of water on the platform, where everyone can see them.) "When the room air conditioner is taking all this water out of the air it's doing a big job, and that job is worth paying for."

### Dirt Elimination

And now Remington's sales manager urges the salesman to tell the prospect about all the dirt that is removed from the air by a room conditioner. To demonstrate this he has a container holding 26 oz. of dirt.

"This is the amount of dirt," Bonneville says, "that is taken into the lungs of the average person in a single year." He points out that the prospect who will refuse a glass of water that has a speck of dirt in it, or send back a cup of coffee when a few ashes are spilled in it, seldom, if ever, considers what airborne dirt is doing to his lungs. This dirt is contaminated, as well as laden with pollen.

"When you tell the dirt story, and tell it right, you are taking a long step in the sale of a room air conditioner," Bonneville relates. And those people who are not worried about the unhealthy effects of dirt always understand the cost of cleaning rugs, drapes, and furniture, both in homes and business places.

And when a salesman is talking to a homeowner he should interpret the 26 oz. of dirt story in terms of human labor. Any woman knows how often she has to dust under the beds, to get lint out of the house."

### Personal Efficiency

The next subject Bonneville asks salesmen to cover is personal efficiency. Surveys by Metropolitan Life Insurance Co., Detroit Edison Co., and others definitely show that efficiency of office workers is sharply increased with air conditioning. And

yet many salesmen completely forget to tell this story. Increased efficiency should be translated into dollars in benefits.

And there are endless ramifications of the room air conditioner story that any wide awake salesman can use to close sales. For instance, in most climates the use of business machines requires control of relative humidity, as the cards jam in the machines when the air is too damp. Currently Remington is issuing special specifications showing how to use both window and console conditioners for dehumidification.

### Use Tricks of the Trade

In addition to "telling the complete story," Mr. Bonneville is asking salesmen to use all the tricks of the trade that have long been successful in specialty selling, particularly of a new product. He is asking salesmen to show their prospects "user lists" in their area—photographs of installations—and signed testimonial letters.

"This kind of sales ammunition is too often neglected in selling room conditioners," Bonneville has found. For this reason he is suggesting Remington salesmen be equipped with a "Local Data" sales kit.

Finally, the sales manager is outlining a plan whereby Remington distributors use dealer promotions, such as sales contests, prizes, and various other incentives.

**United**  
FOR *Quality*  
AND *Economy*

### DRY KOOL BOTTLE COOLER

World famous for performance and design. 14 models to meet all requirements in stainless steel or brown Dulux finish.



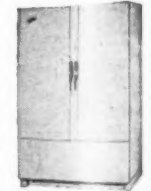
### KUBEMASTER ICE CUBE MAKER

Whenever food or refreshment is served, ice cubes as you need them. Choice of 3 beautiful models.



### REACH-INS

Modern flush fronts with recessed handles in popular sizes. Ten models to choose from. Available in white Dulux, stainless steel fronts and glass doors.



### UPRIGHT FREEZER 15 Cubic Feet

Scientific placement of cooling coils, two separate food compartments, dual doors to minimize cold loss, insure balanced freezing at minimum cost.



### KOOLMASTER DIRECT DRAW

Engineered to serve beer to the "Brewmaster's" taste. Its smart appearance enhances any establishment. Choice of 8 models in Stainless steel or brown Dulux finish.



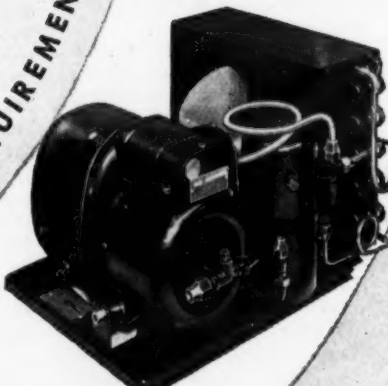
DESIGNED—ENGINEERED—MANUFACTURED  
By  
**UNITED REFRIGERATOR COMPANY**  
Locust and Walnut Sts.  
HUDSON, WISCONSIN

**Servel**  
**SUPERMETIC**  
ELECTRIC CONDENSING UNITS

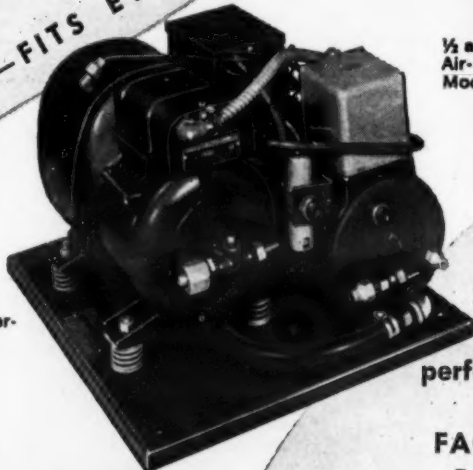
- ★ Medium and low temperature sizes
- ★ Sealed-in lubrication
- ★ Simple to install, easy to check
- ★ Compact space-saving design
- ★ Air and water-cooled types



¼ and ½ HP  
Air-Cooled Models



½ and ¾ HP  
Air- or Water-Cooled  
Models



1 HP Air- or Water-  
Cooled Models



1½ and 2 HP Air- or  
Water-Cooled Models  
3 HP Water-Cooled

Servel Supermetic's high record of trouble-free performance makes possible an amazingly liberal FACTORY WARRANTY . . . 5 years on current models up to 1 HP . . . One year on larger sizes to 3 HP.

ALSO AVAILABLE . . . Compact Hermetic Power Units, ½ to 5 HP, for manufacturers of high temperature equipment, and ½, ¼, ⅛, 1/16 HP capillary tube condensing units for small fixture applications.

**Servel**  
**SUPERMETIC**  
SERVEL, INC. ELECTRIC REFRIGERATION DIV.  
EVANSVILLE 20, INDIANA





## "This inside story gives me the inside track"

"THE FREEZER BUSINESS IS A GOOD BUSINESS... a sound business... and a business with growing opportunities for retailers for years to come.

"That's especially true of retailers like me who sell Kelvinator.

"For, as in no other freezer, lasting values are built into every Kelvinator to assure utmost customer satisfaction.

"That's a pretty strong statement. But consider the special features Kelvinator builds into its freezers:

- An inner liner of galvanized, bonderized steel, with baked-on aluminum finish, instead of raw cold-rolled painted steel.
- Built-in heater coils.
- An extra blanket of insulation on the bottom and lower portion of the sides.

- Refrigerant tubing *soldered* to the liner for maximum heat transfer.

- A *completely* sealed cabinet that is air-pressure tested to insure a positive seal.

"Plus Kelvinator's time-proved Polarsphere cold-maker... a leading reason why this freezer can really be depended on!

"Yes, in Kelvinator freezers I've got what it takes to put me out front, to keep me out front in going after... and getting... freezer sales. For I've got the inside track with the soundest inside story in the business. A *quality* story that is exclusive with Kelvinator

"It's this insistence upon quality that makes Kelvinator first choice among my customers—and the Kelvinator franchise first choice with me!"

GET MORE

*Get* **Kelvinator**

TUNE IN—ENJOY IT! THE PAUL WHITEMAN TV TEEN CLUB ON ABC-TV NETWORK presented by Kelvinator and Nash Dealers. See your local paper for day, time and station.

THE MOST VALUABLE FRANCHISE IN THE APPLIANCE INDUSTRY  
ELECTRIC REFRIGERATORS... RANGES... FREEZERS... WATER HEATERS... AIR DRIERS

KELVINATOR • DIVISION OF NASH-KELVINATOR CORPORATION • DETROIT 32, MICHIGAN



## 15% Down, 18 Months -- Solving Selling Ban --

(Concluded from Page 1, Column 3) the minimum payment requirements of \$5 per month or \$1.25 per week. A customer can now take 18 months to pay for an \$18 radio, if the dealer desires, a Federal Reserve official said.

What constitutes a trade-in in the eyes of the FRB was also changed slightly. Here is the new reading, with changes in italics:

"(j.) *Trade-in.* Any property which the seller of a listed article buys or receives in exchange, or arranges to have bought or so received, from the purchaser at or about the time of the purchase of the listed article shall be regarded as a trade-in for the purpose of this regulation."

As yet the Federal Reserve Board has not offered any guide or standard for amounts to be allowed on trade-ins for appliances. In the automobile field, where trade-ins were always permitted to apply to the down payment, the FRB has designated certain trade-in guides as governing the amounts that may be offered for old cars.

Although there is nothing in the law to prevent a dealer from giving a prospect the full amount of the down payment as a trade-in allowance, one Federal Reserve official said that he would not like to see such "inflationary" advertising as "no down payment, 18 months to pay."

Another change eliminates the requirement in the case of household repairs, alterations, or improvements that the down payment be received before the completion of the agreed upon repairs, alterations, or improvements.

(Concluded from Page 1, Column 5) bureau's opinion, unless it sets up practical procedures for putting this objective into everyday practice. The setup must be wholly sincere and of a magnitude in time, effort, and cost commensurate with the problem."

These five steps were suggested:

"1. Some vehicle must be utilized in which all direct sellers can and will unite in a constructive and cooperative program for survival. The leadership provided must have the full confidence of both sellers and the public.

"2. A voluntary code of ethics must be adopted which will ban unfair, deceptive, and annoying practices in direct selling and which will assure the public of satisfaction in its direct selling purchases.

"3. A practical means of enforcing the code effectively throughout the nation will have to be put into operation.

"4. A model ordinance to regulate direct selling will have to be supported. It will have to give the community the protection to which its citizens are entitled against any solicitors who abuse their privilege.

"5. Assuming that the above steps are successfully taken, an extensive educational program will have to be conducted continuously to prove to community leaders and legislators, as well as the public, that the direct selling industry is performing in the public interest and merits public support."

The bureau said it "believes that the American public is essentially reasonable and fair in its attitude toward business and that it will neither demand nor support efforts which are designed to prohibit any method of business that serves its interests."

## Over-All Excise Tax Advocated by NEMA

WASHINGTON, D. C.—Representatives of appliance retailers and manufacturers paraded before the Senate Finance Committee this week to protest against manufacturers' excise taxes on appliances, and particularly against any rise in now existing taxes.

Mort Farr, president of the National Appliance and Radio Dealers Association, told the Senate Committee that the present 10% TV set excise tax, which became effective in November of last year, has hurt business tremendously and is driving many dealers to the wall.

Farr said that bankruptcies among appliance dealers in the first six months of this year were 22% greater than that of 1950, while the rate among other retail establishments has been virtually unchanged. He also said that sales were off from 50 to 60% from last year.

J. R. Poteat, representing NEMA, advocated broadening the tax base to include most household items (such as furniture, floor coverings, china) and assessing the tax at a uniform rate, and imposing the tax upon the cash price at the retail level.

## Super Market Institute Will Hold Meeting In New York Dec. 2-6

NEW YORK CITY—The Super Market Institute will hold its annual mid-year meeting Dec. 2-6 at the Hollywood Beach hotel, Hollywood Beach, Fla., it was announced by S. N. Goldman, president.

## Operation Renovation

### Kansas City Dealers, Servicemen Find Headaches In Putting Units Back Into Operation; Mfrs.' Plans Aid

KANSAS CITY, Mo.—The digging out, cleaning up, repairing, and replacing operations are occupying much of the attention of refrigeration dealers, contractors, and servicemen in areas throughout Kansas and Missouri that were hit by the flood.

First step in many cases will be in getting electrical circuits back in shape so that current will be available for equipment. Many lines will have to be re-run because they were torn loose by debris thrown around by the flood. A lot of re-insulation and motor repair work will also be necessary.

Manufacturers are urging replacement of electrical controls, pointing out that controls are not designed to withstand submersion in water, and since it is almost always neces-

Amara officials said some work would be done in the field, and that probably some units would be shipped back to the factory for repair.

### CROSLLEY, BENDIX PARTS PLAN

Both the Crosley and Bendix Home Appliances division of Avco Mfg. Corp. have offered owners of flood-damaged Crosley appliances emergency repair service and parts on a cost basis. Newspaper advertisements throughout the flood area said that for the duration of the emergency "all service and parts will be charged for on a strictly cost basis—without so much as one penny profit anywhere along the line."

Maytag Co., manufacturer of home laundry equipment, has sent nine factory service representatives to help 200 Maytag dealers in the flood area in the repair and renovation of damaged Maytag appliances.

The repair work will be done at special prices. The program will be administered from the North Kansas City branch office of the Maytag Co.

Many self-contained units, both household and commercial, simply floated away (see box). The same thing also happened in some remote-type installations in which the fixtures tore loose from the refrigerant lines and floated away.

### HOW TO DRY INSULATION

Repairmen are said to be in need of advice on how to dry out the insulation in household refrigerators and freezers, and also in commercial refrigerators.

The National Production Authority has issued a special order permitting MRO orders for supplies for flood rehabilitation work to be certified and extended under CMP Regulation 5, and that such orders are not to be chargeable to the normal CMP allotment or quarterly quota and can be extended all along the line.

### Credit Restrictions All Off In Flood Area

KANSAS CITY, Mo.—All credit restrictions have been removed for persons who need repairs or new appliances because of flood damage.

This action, taken by the Federal Reserve Bank of Kansas City, is limited to the part of Missouri in the Tenth Federal Reserve District and to the states of Kansas, Nebraska, and Oklahoma. Similar action was taken by the Federal Reserve Bank of St. Louis for the Eighth Federal Reserve District.

The ruling makes it possible for individuals to buy commodities on the installment plan with no government restrictions as to the down payment or length of time to complete payments, if the individual signs a statement saying the need for the commodity was brought about by the flood.

(From a Kansas City newspaper story)

All good things don't come through time payments.

A squatter in the lowlands east of Kansas City has a new 18-cu. ft. home freezer, in good working condition. Air trapped in the compartment made the freezer float.

He found it in an eddy of driftwood. All the refrigeration mechanism was sealed in oil. Only the electric motor needed cleaning before the squatter started it humming.

"Now all I got to do is catch me a swimming pig," he said. "Thanks, Kansas City."

sary to replace major parts due to flood damage, the cost of repairs becomes prohibitive. Thus, control manufacturers generally have offered a special 10% allowance on replacement of flood-damaged controls.

### AMANA TO REPAIR FREEZERS

Amana Refrigeration, Inc., producer of home and farm freezers, has announced through its distributor-dealer organization the following offer of its services in the cleaning and repairing of any new, used, or in-use Amana equipment which was damaged by the flood:

"We will clean, repair, and place in good operating condition, any new, used, or in-use Amana freezer which was submerged by the recent floods and thus rendered inoperative. We will do this work without cost to you, your dealers, or your consumers.

"Furthermore, we will reimburse any user of an Amana freezer, installed in a home, for loss due to food spoilage resulting from the floods. This offer is made notwithstanding the fact that this goes well beyond the coverage afforded by our food spoilage warranty."

Dealers are asked to obtain the model and serial number of each flood-damaged Amana freezer in their territory, together with name and address of the user, and forward this information to the factory.

# Crystal Tips

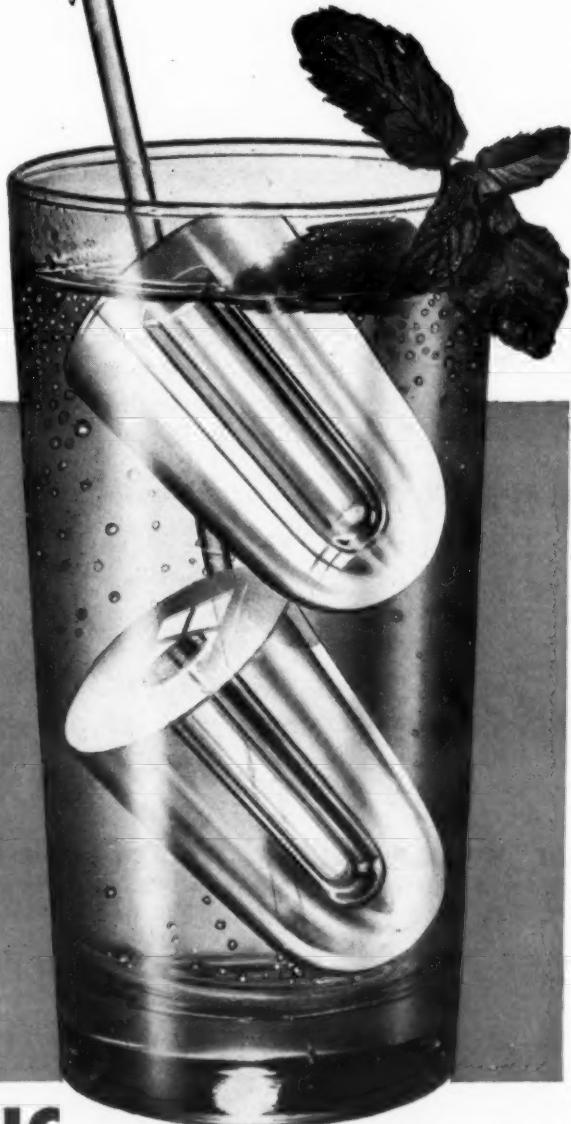
## HERE'S THE ICE MAKER EVERYBODY IS TALKING ABOUT...

Talk is making Crystal Tips Ice famous... talk about its economy and convenience—and quality. Owners talk about the money Crystal Tips save them—up to 85% on former costs of ice—and how having a constant full supply on hand at all times has eliminated all the muss and fuss of depending on deliveries. They like what they hear from their guests and patrons, too—that long-lasting Crystal Tips cool drinks faster, keep them fresh longer.

**NOTHING LIKE IT...** Investigate for yourself. You'll agree there's nothing like the fully automatic Crystal Tips Ice Maker for cutting costs and building better business with this better ice.

# ICE

THE ROUNDED  
"CUBES" WITH THE  
EXTRA COOLING  
SURFACE...  
KEEP DRINKS  
FRESH LONGER!



SAVE UP TO 85%  
ON PRESENT ICE COSTS!



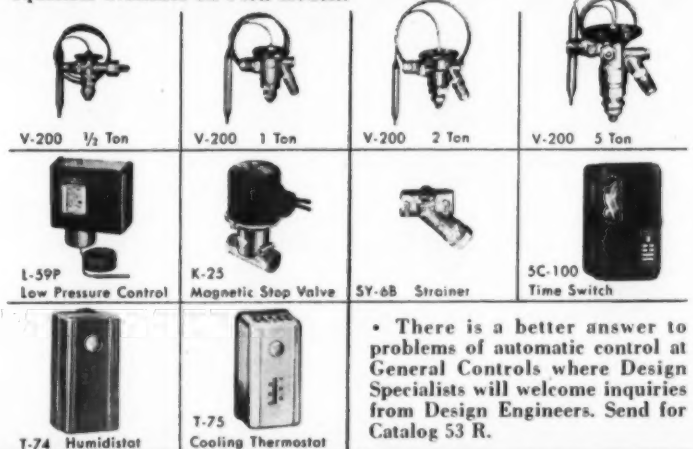
## AMERICAN AUTOMATIC ICE MACHINE COMPANY

A Subsidiary of McQuay, Inc., Manufacturers of Heat Transfer Equipment Since 1923.

1763 FOURTH STREET N.W.  
FARIBAULT, MINNESOTA

for better  
**AUTOMATIC CONTROLS**  
better check  
**GENERAL CONTROLS**

Thermal Expansion Valves... V-200 Series. For high or low temperature applications suitable for Freon, Methyl Chloride or Sulphur Dioxide. Non-adjustable, adjustable and super-heat models available. External equalizer available on 5-ton models.



• There is a better answer to problems of automatic control at General Controls where Design Specialists will welcome inquiries from Design Engineers. Send for Catalog 53 R.

**GENERAL CONTROLS**

Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls

FACTORY BRANCHES: Baltimore 3, Birmingham 3, Boston 14, Buffalo 3, Chicago 5, Cleveland 15, Cincinnati 15, Dallas 3, Denver 4, Detroit 25, El Paso 1, Evansville 1, Houston 1, Indianapolis 3, Kansas City 2, Milwaukee 1, Minneapolis 2, Newark 1, New Orleans 1, New York 1, Omaha 2, Philadelphia 22, Pittsburgh 22, St. Louis 2, Salt Lake City 1, San Francisco 7, Seattle 1, Tulsa 1, Washington 1, D.C. DISTRIBUTORS IN PRINCIPAL CITIES



## IAEL Meeting Set for New Orleans Oct. 10-13

NEW YORK CITY—Profit possibilities for dealers in appliance service, training dealer salesmen, and recent developments in the television field are three of the subjects to be discussed at the 16th annual conference of the International Association of Electrical Leagues.

The conference will be held Oct. 10-13 at the Roosevelt hotel in New Orleans.

The talk on appliance service will be given by H. E. Putnam, customer service manager, Landers, Fry & Clark. E. J. Hegarty, director of sales training, Westinghouse Electric Corp., will speak on training salesmen. Developments in television will be covered by Glen McDaniel, president, Radio-Television Manufacturers Association.

Among others scheduled to speak are Dr. Dexter M. Keezer, director, Department of Economics, McGraw-Hill Publishing Co.; C. W. Leihy, publisher, *Electrical Dealer*; W. T. Clark, manager, residential sales, Cleveland Electric Illuminating Co.; Henry P. Fowler, manager, Trade Association Department, and general counsel, U. S. Chamber of Commerce; K. G. Gillespie, vice president, The Electric Association of Kansas City; and Fred Sudduth, electrical contractor.

A speaker yet to be named will examine the effects of the defense program on the availability of critical materials for the manufacture of electrical appliances and equipment.

In addition to the addresses, there will be two half-day forums for discussion of problems met with in league operations. One will be a panel discussion in reverse, with panel members asking the questions rather than answering them.

The other open forum will take up five subjects: grass roots meetings for farmers, electric bedcovering promotion, television service training program, defense mobilization survey, and light conditioning.

Guest speakers at two special luncheons will be Clifton L. Ganus, Jr., professor at Harding college, and S. L. Drumm, vice president, New Orleans Public Service.

The planned entertainment program will include a boat excursion up the Mississippi river.

The conference is open to representatives of all branches of the electrical industry who are interested in expanding the market for electrical products and service by cooperative means.

## Giveaways To Spur Sales 'Down Mexico Way' Used In Big Way

MEXICO CITY—If you think the use of giveaways to spur consumer buying is confined to U. S. merchandising, take a look at what's going on "down Mexico way."

Customers are being offered everything from bottle openers to \$40,000 homes. In between these extremes, prizes include appliances, automobiles, cash, alarm clocks, and lottery tickets.

Most active in this type of promotion are the soft-drink bottlers. But food processors, newspapers, airlines, match factories, liquor distillers, and others are also going in for giveaways in a big way.

Labels on its vermouth bottles were used by one company to raffle refrigerators, television sets, radio, and a new Packard, among other products. Two completely furnished homes valued at \$20,000 to \$40,000 are awarded every year by each of three newspapers to holders of lucky tickets, with chances given to everyone who takes out a three-months' subscription.

One of the more unusual stunts was dreamed up by Canada Dry, which awarded an alarm clock to those who turned in a series of bottle caps marked with numbers from one to 10. Pepsi-Cola tried something similar; it exchanged cash prizes for certain bottle caps on which had been marked amounts of money. And some Mexican match factories were putting lottery tickets in their match boxes.

Public response to these promotions—advertised via newspapers and radio—has usually been terrific while the campaigns continue, with sales soaring from 60% to 600%. But once the giveaways end, sales fall below normal in many cases.

## All Customers Must Brush Shoulders with \$400 Models; Many Buy 'Em

BRIGHTON, Colo.—Platte Valley Gas & Electric Co. here sells more \$400 refrigerators than it does \$200 models.

How? By setting the higher-priced box just inside the store entrance so every visitor must practically brush against it when entering.

For at least the space of time they are edging past the refrigerator, visitors can hardly help notice the handy shelves in the door, it was pointed out by J. B. Gilmore, head of the company. Consequently, he said, many stop to examine the shelves and food items on them.

"Our experience has been that the appliance prospect who looks over this box is often dissatisfied with the lower-price models displayed further back," Gilmore reported. "As a result, we are selling a large part of our total volume from the best-priced model in stock."

## OPS Seeking Injunction Against Non-Filing Firm

WASHINGTON, D.C.—The Office of Price Stabilization has asked the United States District Court in Trenton, N. J., to issue an injunction against Binder's department store of 132 W. State St., that city, for violation of Ceiling Price Regulation 7 requiring the filing of ceiling price charts showing retail markups.

Judge Philip Forman, chief judge of the United States District Court of New Jersey, issued a show cause order.

According to Edward P. Morgan, assistant director of OPS in charge of enforcement here, the Trenton firm which does a business of around \$600,000 a year, is one of a number of retail stores throughout the nation which have failed to file the required charts.

The injunction proceedings seek to compel the Trenton firm to file the charts. They also ask that the firm be restrained from doing business unless or until it files the charts and

also keeps other records and sales information as required by OPS.

Trenton district OPS officials told the United States attorney that the Binder firm has also ignored a warning letter and failed to give assurance in a conference of counsel that it will comply within the stated grace period.

Morgan stated that while the majority of retail stores have filed the required charts, there are still many which have not done so as yet, and that court action will be taken against dilatory firms to force compliance.

## Freezer Purchasers Given \$85 Worth of Frozen Foods

ELMIRA, N. Y.—F. F. Milne & Co. here gave considerable impetus to its home freezer business by offering \$85 worth of frozen foods free with each freezer purchase.

The store issued a check to any grocer of the customer's choice, covering \$85 worth of frozen foods which the freezer buyer was permitted to select personally.

## Movie, Refreshments, and Demonstration Highlight 'Appreciation Party'

PASADENA, Tex.—An "Appreciation Party" staged in the Capitan theater here for its customers by Finger Furniture Co. was such a success that the firm plans to hold more of them, according to Jodie Hoffer, appliance sales manager.

More than 1,500 residents of Pasadena and the surrounding trade area turned out for the event, which consisted of a free movie and refreshments. During an intermission, distributor representatives presented live demonstrations of appliances displayed in the theater lobby.

Guests were greeted by Sam Finger, Jr., vice president of the firm which operates nine retail stores in Houston and Pasadena, and Dwight Newman, manager of the Pasadena store, which was opened last January. Sam Diamond, Finger merchandising manager, was master of ceremonies for the party.

ANOTHER GOOD REASON WHY YOU SHOULD...

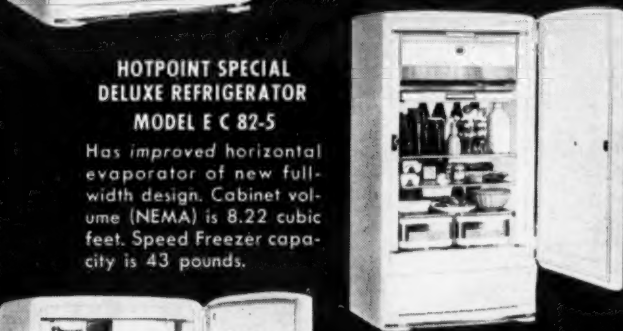
# Switch to Hotpoint!

for FULL-LINE LEADERSHIP!



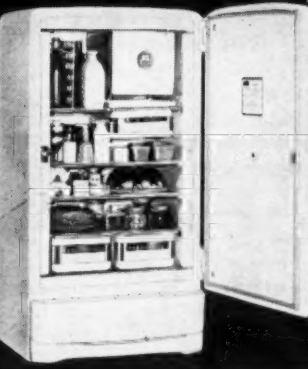
**HOTPOINT SUPER-STOR REFRIGERATOR MODEL E D 110-5**

Now... with new, improved Full-Width Speed Freezer! Model ED 110-5 has cabinet volume (NEMA) of 10.99 cubic feet with Speed Freezer capacity of 49 pounds.



**HOTPOINT SPECIAL DELUXE REFRIGERATOR MODEL E C 82-5**

Has improved horizontal evaporator of new full-width design. Cabinet volume (NEMA) is 8.22 cubic feet. Speed Freezer capacity is 43 pounds.



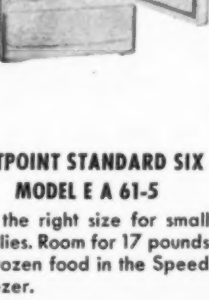
**HOTPOINT DELUXE EIGHT REFRIGERATOR MODEL E B 81-5**

Has an efficient Speed Freezer that holds 24 pounds of frozen foods. The cabinet volume (NEMA) is 8.11 cubic feet. Has two large vegetable pans on rollers. Plenty of room for fresh foods and tall bottles.



**HOTPOINT STANDARD EIGHT REFRIGERATOR MODEL E A 83-5**

Neither storage space or beauty is sacrificed in this economy-priced 8-foot refrigerator. Speed Freezer holds 24 pounds.



**HOTPOINT STANDARD SIX REFRIGERATOR MODEL E A 61-5**

Just the right size for small families. Room for 17 pounds of frozen food in the Speed Freezer.



**HOTPOINT STANDARD FOUR REFRIGERATOR MODEL E A 40-5**

Ideal for small apartments, lodges, offices and camps. Ample room for fresh food. Speed Freezer holds 9 pounds.



**Hotpoint Super-Stor Combinations Models E G 106-5 and E G 87-5**

The world's finest combination Refrigerator and true Food Freezer. Model E G 106-5 has cabinet volume (NEMA) of 10.61 cubic feet. Freezer holds 70 pounds. Model E G 87-5 has cabinet volume (NEMA) of 8.7 cubic feet and freezer holds 52 pounds. Both have shelves in doors, butter bins and many other modern conveniences.

## Hotpoint OFFERS YOU EIGHT MAGNIFICENT REFRIGERATORS TO MAKE YOUR REFRIGERATOR LINE COMPLETE!

Among Hotpoint's complete line of the world's finest and most convenient refrigerators there is a size, type and price to fill every family's specific requirement. Hotpoint's eight magnificent new models include...

1. Two great new Super-Stor Combinations, at the top end of the line, combining full-size Refrigerators with true Food-Freezers—both in one handsome cabinet. These models feature two separate compartments, two doors and separate temperature controls.
2. Two magnificent new models, in the middle of the line, featuring the new, improved Full-Width Speed Freezers. One model has door shelves and butter bins. Both provide proper air temperatures under all conditions, eliminate excessive sweating or condensation and have the popular Tele Frost indicators.
3. Four popular models, in the lower priced end of the line, to fill out the complete range of styles and prices to fill every family's need. When you step up to Hotpoint Refrigerators you step up to the finest!

Hotpoint's complete line of the world's finest refrigerators is further proof of Hotpoint's Full-Line Leadership—a leadership which makes the Hotpoint Full-Line Franchise the industry's most coveted. Have a talk with your Hotpoint distributor and get on the right track to full-line profits—every month of the year.

# Hotpoint Inc.

A General Electric Affiliate

5600 W. TAYLOR ST., CHICAGO 44, ILL.

RANGES • REFRIGERATORS • DISHWASHERS • DISPOSALS • WATER HEATERS • FOOD FREEZERS • AUTOMATIC WASHERS • CLOTHES DRYERS • ROTARY IRONERS • CABINETS



## INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

versal-International, presents a thought. Mrs. Landau claims that a handsome puss isn't nearly so important as what comes out of it.

"I can tell by the timbre of the voice whether there's any real feeling there," she says. "We can always doctor a face, but it's the heart that counts finally."

### Wisdom of the Week

"The use of opinion research is to be welcomed insofar as it makes businessmen more aware of public opinion and hence of their companies' public responsibilities.

"Opinion study is a kind of organized eavesdropping. It may be a first step in a company's efforts at communication, but it is not communication itself.

"True communication can take place only between parties in direct contact, when there is a continual exchange of ideas and a simultaneous mutual influence.

"This can happen only when human beings are treated as humans . . . rather than as isolates pouring ideas through a series of anonymous agents into the hopper of a tabulating machine."—LEO BOGART, personnel expert for the Standard Oil Co. of New Jersey.

### Cute Trick of the Week

Somewhat we Americans don't associate English merchants with giveaway gimmicks and "Mad Man Muntz" stunts.

That's why we were jolly well surprised to learn that the owner of an East London department store refunds all cash paid for his goods in a varying (and secret) half-hour period each day. Patrons received refunds by presenting time-stamped receipts given them at the moment of purchase.

As a result of this promotion stunt, his business tripled. And, according to the English promoter, this increase "was well worth it since the free time represents only about 6% of my turnover."

### Sports Note

F. G. "Ted" Coggin, assistant general sales manager of Detroit Lubricator, is widely regarded as one of the best racing sailors in the world. That reputation was further enhanced a fortnight ago in the annual Chicago-to-Mackinac and Port Huron-to-Mackinac races.

For the first time in history (which goes back a long time on these classics) there was a double winner. *Escapade*, which "Ted" helped sail, won both races going away.

Owner of *Escapade* is Wendell Anderson, president of the Bundy Tubing Co. Hence the refrigeration industry has a dual reason for beaming with pride.

### Brooklyn Celebrity Notes

Ted Reina, Chrysler Airtemp distributor and president of the Refrigeration & Air Conditioning Contractors Association, has been named "Man of the Week" in Brooklyn.

"Uncle Ted," as he is known in the city where The Tree grows and the Dodgers murder Giants, spends \$500 a month taking Flatbush children to free movies at regular theaters.

During intermission he talks to the kids about sportmanship, safety, and Americanism. They love it, and love him. Also he sponsors baseball and softball teams, and works with the Boy Scouts and the Flatbush Boys' Club.

For our money, this is Americanism in action!

Alex Lewyt, president of the Lewyt Corp. has been awarded the *Civil Service Leader's* first Public Service Award of Merit. This presentation was made by Harold Keller, Commissioner of Commerce of the State of New York.

Salute!

Mr. Lewyt's award was a direct result of his activity as vice-chairman of the New York anti-crime committee and, in the words of Mr. Keller, "for bringing harmony into the spontaneous campaign of the citizens of New York against crime."

Mr. Lewyt is also chairman, Brooklyn division of the Greater New York Fund; member of board of directors, the American Red Cross (Brooklyn); member of board of trustees, National Probation & Parole Association; panel member of the American Arbitration Association; director and member of the executive committee of Brooklyn Chamber of Commerce; and director, National Sales Executives Club.

### Case History In Economics

Starry-eyed Americans who didn't understand why Korea was so backward—despite its 4,000 years of independence—believe they have the answer now:

High taxes.

Eight hundred years ago Korea was a progressive nation which produced magnificent art objects and the world's first encyclopedia. Its seamen sailed the first battleship, and its astronomers were far ahead of their times.

Progress went backward after the Yi dynasty took charge around 1400 A. D. The privilege of collecting taxes was sold to favorites of the court, who grew fat on the difference between what they paid the national treasury and what they collected. Taxes grew and grew until they became almost confiscatory.

Eventually, normal desire to accumulate property disappeared, and the "solid citizen" middle class vanished. Thievery, gluttony, and idleness became national characteristics which have persisted for five centuries. Men who can make money in Korea prefer to spend it on food or entertainment rather than on investments.

Long ago American field commanders found it necessary to issue rations to South Korean troops one meal at a time. Otherwise they'd consume an entire day's ration at a single gorging. Reason: *They didn't trust the future.*

The three-man shovel is a typical Korean work-spreading device. This shovel, which astonishes American soldiers, is operated by three men. One shoves the shovel, while the other two take turns pulling.

Centuries of high taxes have kept Korea "backward." Sensible Korean citizens work as little as possible because they hate tax collectors.

### Westinghouse Launches Discussion Program

Westinghouse Electric Corp. has inaugurated a novel program designed to stimulate discussion among all of its 105,000 employees as to benefits of the American way of life and the danger of losing those benefits. In turn, employees are given an opportunity to present this program to outside groups of their friends and neighbors.

The program consists of two one-hour sessions with groups of not more than 20 persons. First one-hour meeting is devoted to a movie entitled "In Our Hands," and to a discussion period. On the following day the discussion period is longer.

"The whole idea is simply to get people talking about the benefits of American living," writes Tom Turner, vice president in charge of plant labor relations. "Too often in this country we take too much for granted the things we possess. Many times we don't actively defend our right to individual free action because we feel it's something that we have and can't lose.

"Yet, in recent years the 'something for nothing' advocates have gained an alarming number of converts to their way of thinking. Many people feel they would be as well off under government control of all business as they are under the free enterprise system.

"Industry has been criticized for failing to explain the free enterprise system to the public in understandable, believable form. We feel the best way to do that is to stimulate discussion about our American way of life, because when people begin talking about it and thinking about it they realize that our heritage of freedom is really something priceless and not just the empty words of a political orator."

A discussion leader, he declares, can be anyone "who can stand on his feet in front of his fellow employees, or his neighbors, and who can read.

"Just reading a question and looking at the audience is generally enough to get them talking," Mr. Turner has discovered. "As a matter of fact, the first two or three questions are designed to 'break the ice.' After that everyone wants to participate."

All employees in these gatherings are voters and independent Americans. Anyone can voice his opinion without wondering what the boss will think about it.

The program is working fine and can be recommended to other business firms. Additional succinct and persuasively-phrased texts are needed, it is said.

### Forum and Againstum

Northern States Power Co.  
Eau Claire, Wis.

Editor:

I enjoy reading your column "Inside Dope" both for the humor and the sound sense contained therein.

F. J. DINKEL  
Merchandise Manager

The Trion Co.  
Appliance Distributors  
El Paso, Tex.

Editor:

Having received the issue of July 16 as usual I read your column first. I was shocked to learn that the Peabody hotel has been moved to Nashville.

Since leaving Memphis in 1948 I have heard that a great number of institutions and prerogatives long associated with that great city have been moved to Nashville, but not the Peabody hotel or the Mississippi river. Heaven forbid, and what would become of the ducks?

CLIFF TRION

Tyler, Texas

Editor:

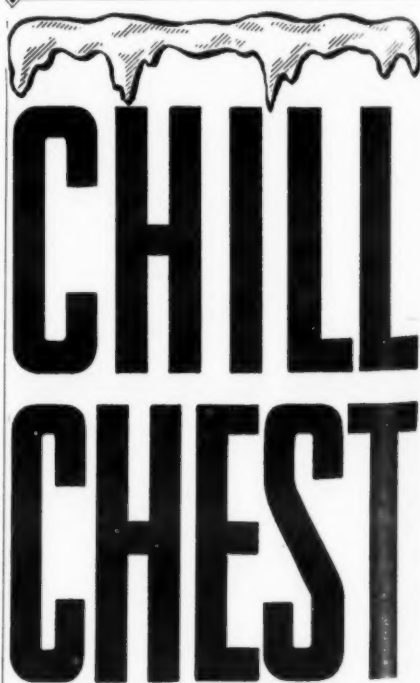
When selling gets rough, the sales force is generally blamed. Are you really sure that the salesmen are entirely to blame or should management share the blame? Times have changed since Elder Statesmen beat the bushes. The modern housewife does not stay at home as much as formerly and when she is there, she is often not AT HOME to canvassers.

The housewife has been trained to shop for discounts, long trades, or premiums which the younger salesmen are not allowed to give. Former sales records were frequently made in times of an anticipated scarcity or when it was permissible to give liberal terms. Today, neither of these methods of selling can be used as a leverage for sales.

The average salesman is expected to be—and many are—on the job ten hours a day, at least five days per week for an income which is modest by today's standards, and which fluctuates widely from season to season. He is expected to dress well, to have a good serviceable car and to belong to clubs. All these are actually business expenses which deduct from that income.

I enjoy reading Inside Dope. You are generally campaigning for good causes; please don't condemn salesmen for conditions over which they have little control.

HAROLD F. ZIFF



**CHILL CHEST**

*The Greatest VALUE in FOOD FREEZERS*

THE FAMILY'S PREFERENCE EVERYWHERE



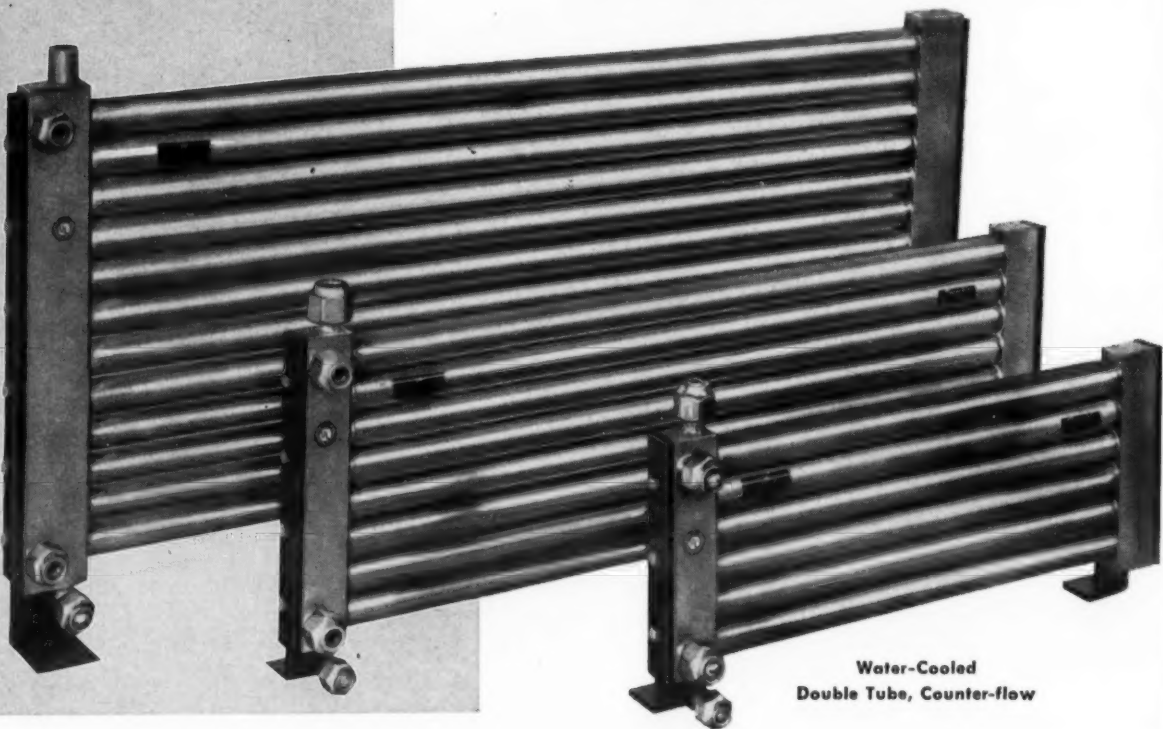
Revco, INC. • DEERFIELD, MICH.

No. 1 Requirement—in any size unit

an

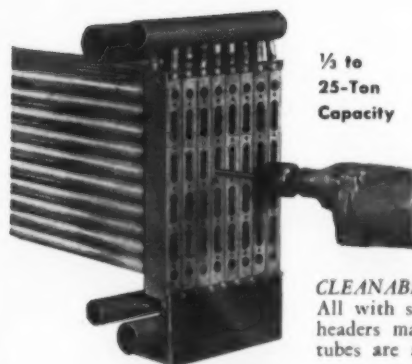
HM

**CLEANABLE CONDENSER**



Water-Cooled Double Tube, Counter-flow

Regardless of whose condensing unit you buy—and regardless of its size—your first "must" is to insist that it have a CLEANABLE (water-cooled) condenser to help you maintain new-unit efficiency indefinitely. When you realize that use of a simple spiral tool, doing a thorough mechanical cleaning job, can always restore copper-water surfaces to their original heat-exchange efficiencies, you won't settle for anything less than a cleanable condenser. And especially so now since most major manufacturers recognize the demand for "Cleanable", and are equipping their units accordingly. Remember too, you can now count on surprisingly low initial cost that is made possible by Halstead & Mitchell's tremendous high productive capacity.



1/2 to 25-Ton Capacity

CLEANABLE—in all size capacities. All with seamless copper tubes, brass headers machined and brazed. Water tubes are accessible from either end.

HM  
**Halstead & Mitchell**

Wholesalers in Principal Cities—Write for descriptive literature

OFFICES: BESSEMER BUILDING • PITTSBURGH 22, PA.



## Selling Packaged Kitchens

Specialty Selling Techniques, Rotogravure Section Advertising, Color Sketches, and Persistent Follow-up Produce \$80,000 Volume

BIRMINGHAM, Ala.—Operating its model kitchen department as a separate business, maintaining a complete drafting office, and conducting an advertising program concentrated in the rotogravure section of Sunday newspapers sold more than 15 package kitchens during 1950 for Modern Kitchen Engineers here.

The model kitchen department of the company has increased its sales from a mere \$5,000 in 1946 to \$80,000 in 1950, according to D. E. Griffiths, partner in the firm, who is likewise manager of the kitchen department.

"The secret of this increase," Griffiths indicated, "lies in the fact that we recognize kitchen selling as a specialty operation which should be completely separated from the appliance store, and because we have done away with the headaches of merchandising this equipment."

### DIVORCED FROM APPLIANCE DEPT.

To "divorce" package kitchen operations from the appliance store, Modern Kitchen Engineers operates two stores, side by side, in the downtown Birmingham district.

In one showroom are two complete package kitchens, considerably reduced in size, which give the average homeowner an idea of what the firm can accomplish for him in the "low" and "high" price ranges.

The kitchen showroom is done in brilliant Scotch plaid colors, against which white overhead cabinets, appliances, breakfast bars, and similar "props" stand out sharply.

About 90% of the firm's sales are closed right in the showroom, Griffiths said. This is due largely, he explained, to the fact that in the right-rear corner is a complete drafting office, in which color presentations of each kitchen are made up, as a final "clincher" after a quick visit to the home.

### PERSISTENT FOLLOW-UP

If in-store presentations "miss fire," prospects are followed up persistently.

There were a lot of pitfalls which the company had to tackle, one after another, in order to build up to its \$80,000 1950 volume. First was the matter of estimating the cost of ripping out old fixtures, changing over walls, plumbing, painting, electrical work, etc.

"We had to learn this the hard way," Griffiths commented. "Actually, we have lost money from time to time through improperly estimating the cost of the remodeling job. But after two years of steady application, such losses are a thing of the past."

"We have set up the entire system to show approximately 10% profit on the labor, and from 38% to 40% on installation of fixtures and appliances. It takes close figuring to stay within those limitations, but for the



MODEL KITCHEN is used by Modern Kitchen Engineers of Birmingham, Ala. to promote "packaged kitchens" in contrast to just selling appliances. The firm boosted its volume from \$5,000 per year to \$80,000 by applying selling techniques to selling complete kitchens.

most part, we have been able to do so."

Kitchens installed by the firm range from \$600 to \$1,000, and have gone as high as \$4,000. Much credit is given to the Sunday rotogravure advertisements run every week-end.

These advertisements picture a kitchen recently installed in a Birmingham home, with an enthusiastic testimonial from the homeowner. Each advertisement lists the four basic steps taken in handling a kitchen job.

### FOUR STEPS DETAILED

Griffiths said these steps are: first, going out to the home, estimating the cost, measuring all walls, woodwork, etc.; second, presenting a color sketch of what the ultimate kitchen will look like; third, contracting the entire job on one ticket; and fourth, making a dramatized final presentation of the complete installation.

"All four of those steps must be carried out in sequence and properly, before there is much opportunity in the field," he stressed.

Griffiths has become an expert draftsman in the four years the Modern Kitchen Engineers has been in operation. He personally sketches each kitchen layout and prepares the final drawing, which is finished with water colors and then presented, with an attractive cover, to the packaged kitchen prospect.

"We have found that while some prospects decide not to go ahead with a projected model kitchen, they will usually keep the presentation in a drawer somewhere and dig it out when sufficient funds are on hand to go ahead with the job."

After a new kitchen is installed, Griffiths sends out a full-time home economist to teach the housewife how to get the maximum efficiency and pleasure from her kitchen. The home economist will spend an entire day

or more on the job, which builds goodwill and appreciation.

These methods have enabled the company to sell an average of 10 to 12 complete package kitchens each month. Last November, a record 20 were installed, all as the result of following up the prospect regularly every month, if for some reason the sale "misses fire" at the original contact.

## 'Few Cents a Day' Theme Opens Residential Room Air Conditioning Market

NEW ORLEANS—Emphasizing in newspaper advertising and other promotional media the "few cents a day" cost of room air conditioners has opened up a substantial residential market for Jack Romain Refrigeration Co. here.

Jack Romain, head of the firm, feels that many potential home owner customers are "scared off" by what seems to be a high initial price—overlooking the years of service which the room cooler can provide and its low cost when apportioned over a long period. Therefore, he has been steadily promoting ½ to 1-ton units under the slogan "A Few Cents A Day" in 3-col. 16 in. newspaper advertisements.

Typewritten charts have been made up which give the cost-per-day for use of any Philco room cooler over a set period. The charts—laid out to cover three, five, seven, and 10 years—help to convince the budget-minded homeowner that the purchase of a room cooler is largely akin to covering a home refrigerator, with the total cost of operation as well as the initial cost breaking down to as low as 11 cents per day, it has been found.

Presentation of room coolers in this way has also taken the emphasis off the lowest price ½-ton window units, Romain indicated, inasmuch as the cost-per-day can figure out to approximately the same over an extended period.

## Bonus Promotions Include Free Watches, Groceries And Cocker Spaniels

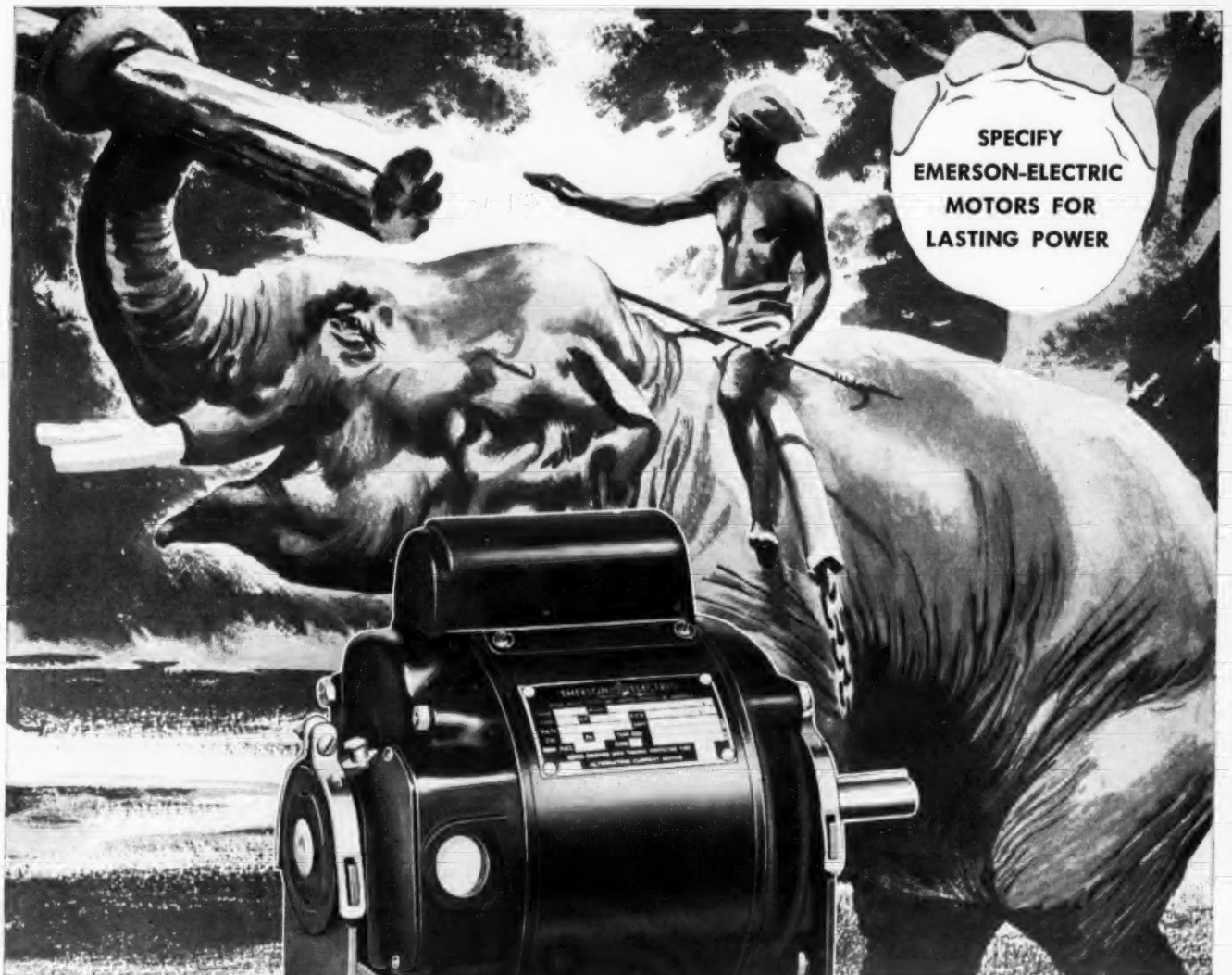
CHEYENNE, Wyo.—Intensive promotion featuring bonus merchandise continued in July to bring refrigerator unit sales comfortably close to last year's figures, reported Manager Irv Crown of Jack's Appliance store here.

Free groceries, free wrist watches, an oldest-refrigerator trade-in promotion, and liberal trade-in allowances and credit terms entered largely into successful selling for July, he explained.

Two local grocery stores—Capital Market and Black & White Grocery and Market—were enlisted in the free groceries promotion. Customers buying a 1951 model 912 Philco 9.1-cu. ft. refrigerator at \$269.95 were permitted to select \$50 worth of groceries free at either of the stores. Useful gifts were given to the first 50 appraisals. The free food offer was limited to one week.

A promotion centering upon the model RD 70 7-cu. ft. Coolerator priced at \$229, featured the gift of a \$59.75 men's or women's wrist watch with each sale. A Cocker Spaniel also was listed as a prize to the person trading-in the oldest refrigerator during the month.

Trade-in allowance up to \$100 on the customer's old refrigerator, providing it operated properly, was emphasized in large-space newspaper advertisements and window cards throughout the month. Also played up was a \$5-down layaway plan.



## Another Haertel Air Master DEHUMIDIFIER



BY THE MAKERS OF THE FAMOUS "VAULTMASTER" DEHUMIDIFIERS, STANDARD IN MANY INDUSTRIES SINCE 1938.

AIR-MASTER model 50-B is a new advance in the art of drying air mechanically. Its "Ratio Damper" gives peak performance at any space temperature from 65° to 95° F. A third heat exchange element permits a part of the work done in cooling the entering air down to dew point, to be recovered. This cuts down refrigeration load. The 50-B challenges all competition for efficiency and economy.

Protect critical equipment and materials from moisture, damage by RUST, MOLD, MILDEW, ROT, WARPING, TARNISH, CORROSION, CAKING.

SEE THIS AND OTHER MACHINES IN THE HAERTEL LINE. YOUR INQUIRY INVITED. WRITE TODAY.

WALTER HAERTEL CO.

2840 4th AVENUE SOUTH, MINNEAPOLIS 8, MINN.

## Built to Last

"How Long Will It Last?" This question can be one of the most important points by which your product is judged. Further, the motor which you choose may be the determining factor.

Emerson-Electric Motors are built to last. Sound engineering and design principles, plus rugged construction have helped to build a reputation for long life into numerous nationally known products. These characteristics have also made them the standard for quiet, efficient, uniform power.

The wide acceptance of Emerson-

Electric Motors by domestic, institutional and industrial consumers is based on a background of 60 years' experience. It's sales assurance to select motors with lasting power. Your inquiry is invited on this complete line of motors in the 1/20 to 5 h.p. range.

The Emerson Electric Mfg. Co.  
St. Louis 21, Mo.

EMERSON ELECTRIC  
MOTORS • FANS APPLIANCES



Emerson-Electric offers manufacturers of hermetically sealed units a broad background of engineering experience, covering all phases of hermetic motor design, specification and performance. In addition, unequalled, specialized facilities are available for the production of hermetic motor parts. Cooperative engineering service is available without charge. Write us today for Free bulletin No. 150.



# 'Display Cases Are Not Storage Boxes'

Shouldn't Carry Meats over 72 Hours, States McCoy of Frigidaire;  
Discusses Methods of Meeting Discoloration & Defrosting Problems

By George M. Hanning

DETROIT—Frigidaire meat display cases, whether self-service or closed are not to be storage boxes. They are designed to display the meat attractively for quick sales, not to store it for more than 72 hours.

That was one of the principal points driven home by Dan C. McCoy of the Frigidaire division, Dayton, Ohio in a talk made recently before Frigidaire commercial refrigeration salesmen in Michigan and their customers.

McCoy discussed "Equipment and techniques for handling self-service fresh meats" before gatherings at Detroit, Saginaw, Kalamazoo, and Traverse City.

Other points emphasized were:

1. Attempting to defrost a self-service case by the heat of the compressor head alone will not work. There is not sufficient heat there to do a complete defrosting job, he asserted. Supplementary sources of heat are necessary.

2. The merchant might just as well set meats on the floor as to stack them in a self-service case above the line marking the limit of the zone of refrigeration. When so stacked they are getting no benefit from the refrigeration produced by the case.

3. There is still no way known to successfully counteract the dis-

coloring effect of light on fresh meats except to wrap the meat in an opaque package. And that, McCoy noted, is not a satisfactory solution because the customer insists on seeing meat before she buys it.

He said that his own theory is that it is not the intensity of light that causes the discoloration, but the radiant heat emitted by the light source. This heat passes through the air and any transparent surfaces and is absorbed by the first opaque surface it hits—in this case, the meat itself.

## Stack Lunch Meats Face Down?

In reply to a question from the floor, he suggested that fast discoloring lunch meats be cut in minimum quantities to serve the trade and then stacked in the case face down, with the cardboard backing between the meat and the light source.

The customer would then have to turn the package over to see the meat. McCoy admitted that this was not a good solution, but would cut down on discoloration.

Excerpts from McCoy's talk follow:

"We know that meats deteriorate in appearance or spoil due to the effect of microorganisms, autolytic changes within the meat itself, and light. Deterioration due to microorganisms and autolytic changes can

be held in check for a reasonable period of time by good refrigeration.

"No answer to the effect of light on the meat, except minimum exposure, or to use wrappers through which light will not penetrate, has been found. Temperature is not an important factor in color change, due to the effect of light, between 0° F. and 40° F.

The use of opaque wrappers is not acceptable at the present time. The customer wants to see what is being bought. It is interesting to note that even though meat may not be salable from the standpoint of appearance, it may still be palatable and entirely safe to eat.

"You all know that some meat will 'cut dark' and for this reason is not as salable as that, which when cut, quickly takes on the 'bloom' and color which the meat man and consumer have been educated to look for and use as the standard of quality.

"Salability of meat today still depends almost entirely upon good appearance . . .

"Bacterial growth on meats increases very rapidly above 45° F. Meats freeze at or below 28 and 30° F. Therefore, to preserve chilled fresh meats without danger of freezing, only a narrow temperature range is available . . .

"Other practical operating consid-

erations which will be discussed later make advisable further restrictions of this range to about 35° F. to 45° F.

"Temperature alone is not a complete answer. Another important factor beside temperature must also be considered—that factor is time. Time and temperature are related in dealing with food preservation.

"There is a fundamental law of chemistry which states that the higher the temperature, the faster a chemical reaction goes to completion. Food spoilage follows this law.

"We cannot take full advantage of the lower temperatures to extend time without freezing the meat or introducing other problems affecting its salability.

## Why the 72-Hour Limit

"Insofar as time is concerned, we must not forget that foods are brought into a retail store to sell at a profit and not to be stored for long periods of time. Experience has proven that the average retail store turns its perishable products within 48 to 72 hours.

"In many stores today, turnover is more rapid than that. Insofar as Frigidaire is concerned, for years our application technique for the retail store has been based on a turnover in a maximum of 72 hours. We see no need to change that standard today.

"Insofar as cut meats displayed for sale are concerned, Jensen (L. B. Jensen, chief bacteriologist for Swift & Co., meat packers) says, 'Sliced meats will hold color and appearance for about 48 hours under ideal carrying conditions. Maximum "life" of such sliced meats averages about 72 hours.' Other sources confirm his statement . . .

"Like every new development, growing pains have been experienced in developing open type display cases for self-serve meats. Earlier types of self-serve fixtures brought many problems. Many of the mistakes made in the '20's when mechanical refrigeration was first being applied to the closed type of display case have been made over again.

## Too Cold, Comes Grief

"The old 'freezing temperature' idea common with the old floor counter has bobbed up again. The attempt to hold cases at 28 to 30° F. or even lower platter temperatures has resulted in much grief.

"Poorly designed and/or poorly adjusted defrosting systems, insufficient coil in the case to handle the refrigeration load at a reasonable refrigerant temperature, lack of proper information available to servicemen and application engineers to equip, adjust, and maintain this type of equipment, users stocking the cases improperly cutting off air circulation are all part of these difficulties.

"There is a vast difference between trying to maintain temperatures in an open-type case and in a closed-type case. An open-type case provides the possibility of trying to refrigerate and dehumidify 'all outdoors.'

"The refrigeration load to maintain temperatures in an open-type case is considerably higher than that required for an equivalent length of closed case. The attempts to carry lower temperatures than the customary 40° F. of the closed case, which has been quite satisfactory in the closed case, has added to the refrigeration load and introduced other complications of operation. The effect of drafts in the store and atmospheric humidity are severe complicating problems.

## Where Defrosting Is Problem

"Open-type meat cases have been developed using both gravity and forced air circulation. The problem of dehydration is not particularly bothersome in open-type meat cases, as the product is protected by the cellophane or other type of wrapper.

"Consequently, it is not necessary to worry about dehydration due to low refrigerant temperatures and high air velocities as in the closed-type case where the meats are directly in contact with the circulating air. A successful open-type meat case using forced air is therefore more easily obtained than a closed one.

"On the other hand, the low refrigerant temperatures which have been used in many designs have severely increased defrosting problems.

"Good air distribution over the coils when using forced air is necessary for defrosting when circulating air is depended upon to handle this function.

"If platter temperatures around 35° F. are maintained, and enough coil surface is used, it is still possible to operate on an automatically defrosting cycle with the simple low pressure control.

"If platter temperatures below 35° F. are insisted upon, then some positive method of defrost must be included in the case design. This increases first cost of the equipment, but is necessary if you are convinced you must have 28-30° F. platter temperature.

"You will also have to resign yourself to occasional freezing of the lower layers of meats and the resultant losses if you insist on a 28-30° F. platter . . .

"There are numerous positive methods of defrosting which can be applied to display cases, provided the proper controls, proper timing of defrost periods, and proper arrangement of the system are used.

## Methods Now Available

"A time clock permitting rise in temperature of the circulating air to 35° F. or above is successful. Electrical defrost methods are very successful, and properly designed hot gas defrosting methods are very successful.

"Successful operations of the open-type case cannot rest alone with correct design of the case. New features which are added to the refrigerating system to make such designs successful must be thoroughly understood by those installing and maintaining the cases in the field.

"Consequently, no matter how good the design may be; if installation, service, and maintenance men are not thoroughly educated in these new developments and trained to handle them; if correct application data for applying compressor, controls, etc. to the cases are not available; failure will result, no matter how good the case design.

"Many of the difficulties experienced during the past few years with open-type display cases can be laid to this situation.

"Self service introduces a new problem which is entirely the merchant's responsibility. The merchant may arrange his display in the case so that proper air circulation can be developed.

## Where Circulation Is Blocked

"Unfortunately, customers using the self-service operation upset this arrangement and unwittingly block circulation. Constant supervision is necessary on the part of the merchant to see that products are promptly re-arranged in such a manner as not to disturb air circulation.

"One smart operator who is making a big success of his self-service meat department, uses a 'hostess' constantly patrolling the self-service meat equipment.

"The hostess is instructed as part of her duties to keep a constant watch on arrangement of the products in the cases and correct any misarrangement caused by the customers, so that proper circulation is maintained at all times.

"Insofar as the customers are concerned, she performs many little personal services for them in obtaining odd cuts of meat which may not be in the counter, larger quantities than packaged, etc.

"The customers like it, and it is a big factor in reducing damage to the product.

"In the past two years, constant work on open meat case problems by commercial fixture manufacturers and refrigeration equipment manufacturers has made great progress in eliminating the equipment difficulties. Educational programs directed at store operating personnel have been slowly eliminating difficulties which are their responsibility."

Tom Gahan, advertising and sales promotion manager for Frigidaire's Detroit branch, following McCoy's talk, announced that Frigidaire is preparing a booklet done in cartoon style that will inform customers just how to use their self-service cases to get the best results from them.



"Keep cool with ESTON!"

METHYL CHLORIDE  
SULFUR DIOXIDE

Distributor of "Kinetic" Chemicals' "Freon" refrigerants.

"FREON 11"—"FREON 12"  
"FREON 21"—"FREON 22"  
"FREON 113"—"FREON 114"

In Standard Containers

ESTON CHEMICALS, INC.

3100 E. 26th St., Los Angeles 23 • 4900 Madison St., Chicago 44 • 60 E. 42nd St., New York 17

WAREHOUSES:  
Seattle, Portland, Chicago,  
St. Louis, Jersey City, Los Angeles

NO CYLINDERS • NO DEPOSITS  
Charg-A-Can  
DISPOSABLE CONTAINER WITH  
"FREON 12"—"FREON 114"  
SULFUR DIOXIDE

ESTON  
Covers the Country!

SALES OFFICES IN ALL PRINCIPAL TRADING AREAS

SAVE \$100

SEND US YOUR ORDER FOR

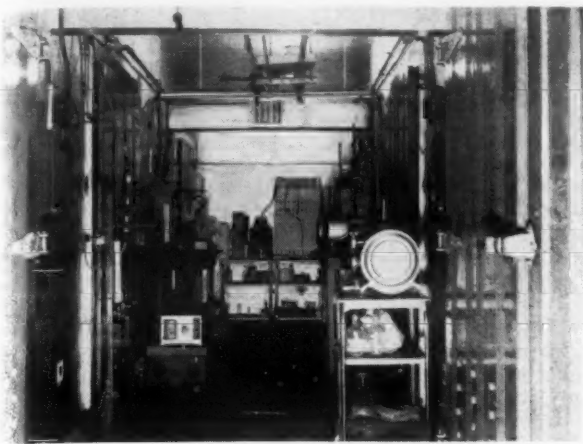
3 or More Automatic Ice-Cubers  
and Get \$100 Off on Total Price

\*Offer Good During August Only

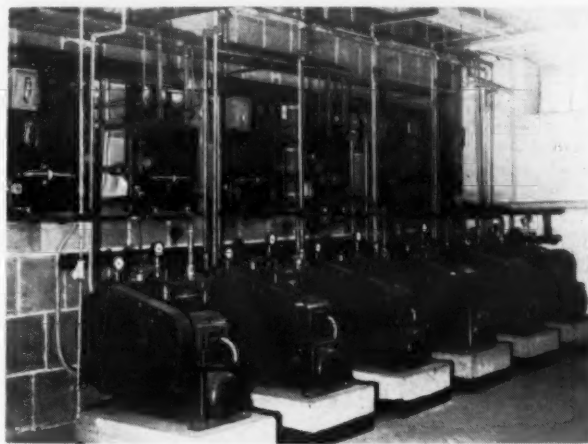
Loudon  
MINNEAPOLIS

COMMERCIAL REFRIGERATION EQUIPMENT  
2524 27th Avenue South, Minneapolis, Minn. 10





One of the new refrigerated test rooms at Purdue university devoted to research studies on storage atmospheres to learn whether products that have similar storage requirements but transfer their odors, may be commercially stored in the same room.



Six condensing units supply refrigeration for the test rooms. Suction lines are paired with valved crossover connections for emergency use in case of a unit failure. Each unit has dual pressure controls, high and low pressure gauges, and oil separators.

## Transfer of Odors In Storage

**Purdue Study To Determine If Foods Requiring Same Temperature Can Be Kept Together Without Absorbing Each Other's Odors**

LAFAYETTE, Ind.—Six new refrigerating rooms, equipped last year for the Horticulture department at Purdue university, are now being used by Purdue for research studies on storage atmospheres to learn whether products that have similar storage requirements but transfer their odors, may be commercially stored in the same cold room.

Apples and shell eggs, for instance, have similar optimum temperature and relative humidity needs. They can be stored in the same room if research can find ways to prevent absorption of apple odors by the eggs. If successful it would save warehouses the expense of operating partially filled apple and egg rooms for long periods.

Being used for the program are six rooms about 15 ft. long by 9 ft. wide and 8½ ft. high. They are built of vegetable cork.

Five of the rooms have walls 4 in. thick. The other is insulated to 6 in. for use in future studies in low temperature work.

Each room has a duct system equipped with manually operated dampers and connected to a central ventilation system. This makes possible the rapid change of air in the refrigerated room in emergencies.

Three rooms are equipped with water-defrost, floor-type blower units operating at 50% of their normal c.f.m.

Large coil surfaces are presented with a differential of less than 10° between refrigerant and room air temperatures. At 31° F., relative humidities of between 85 and 90% are maintained under normal operating conditions.

The other three rooms are equipped with 20 1-ft. by 12-ft. cold plates, each having approximately 24 sq. ft. of surface. Detachable louvered aluminum drip pans are hung beneath the plates.

At 31° F. an average humidity of

85% is maintained with gravity circulation.

All refrigerant lines supplying the rooms enter the corridor above the outer door and are suspended on angle irons beneath the corridor ceiling.

In each suction line is a suction pressure regulator. Each room has its individual magnetic stop valve on the liquid refrigerant line, thermostatic expansion valve and thermostat having a 1½ degree differential above and below room temperature.

The latter instruments are mounted in the corridor and have large remote bulbs mounted in the rooms.

Special attention has been given to the wiring of the rooms. Wire insulation is resistant to moisture and temperature changes. Lights are vaporproof.

All tubing is type K hard copper. Fittings are of extruded copper with all joints silver soldered.

Three 3-hp. "F-12" water-cooled condensing units handle the blower units and three 1½-hp. water cooled condensing units are assigned to the plate loads.

The suction lines from the condensing units are paired with valved crossover connections for emergency use in case of a condensing unit failure. Each unit has dual pressure controls, high and low pressure gauges and oil separators.

Foundations are of monolithic concrete resting on vibracork. A panel board along the machine room wall carries the disconnect switches, relays, heat exchangers, drier-filters, and liquid indicators.

Dr. C. E. Baker of the Department of Horticulture is the coordinator. Work now underway includes:

1. A determination of total volatile levels in the atmosphere of refrigerated apple storage rooms.
2. The chemical analysis of the volatile compounds emanating from

stored apples and other commodities.

3. The effectiveness of activated carbon filters and other types of "air purification" in adsorbing various compounds given off by stored commodities.

4. The effect of the removal of volatile materials on the chemistry, physiology, and storage qualities of fruits, as measured in sugars, starches, pectins, and respiration effects.

## Freez-R-Pak Promotion Sells 14 Home Freezers During First 2 Days

NEW ORLEANS—Radio Center, Ben-Hur freezer dealer here, has reported that it sold 14 home freezers in the first two days of a promotion that featured a Freez-R-Pak kit combination offer.

The offer consisted of a "Get Started" kit of food packaging equipment and supplies valued at \$39.25 given with each Ben-Hur freezer sold. The kit includes an ice cube maker and rack, a food blancher and colander, 24 Freez-tainers, a roll of locker paper, 15 freezer packages, 36 polyethylene bags in assorted sizes, a roll of freezer tape, an automatic marking pencil and refills, and a plastic defroster paddle.

Ray Graves, sales promotion manager for the Ben-Hur Mfg. Co. of Milwaukee, said that the promotion, offered to all dealers and accepted by 80% of them, had produced more orders to the factory in 30 days than the company expected in 60 days.

"Our experience with this promotion," Graves declared, "points up one fundamental factor in the sale of home freezers. Freezer owners want and need more help on packaging and freezing foods. Freezers can be sold more readily if dealers and manufacturers supply this need."

## J. Burnhams Leases Bldg.

BUFFALO, N. Y.—J. Burnhams, Inc., has leased a store building at 819 Tonawanda St. for the sale of appliances.

## Revco Finishes Expansion Of Factory Facilities

DEERFIELD, Mich.—Revco, Inc., manufacturer of Chill Chest home freezers, has recently completed an expansion of its plant facilities here to cover 70,000 sq. ft. of floor space, Gregg F. Forsthoefel, president of the firm has announced.

The expansion includes a new continuous bonderizing, spray-painting system, a new engineering building to house testing, research, and laboratory, a new steel warehouse, and an enlarged employee parking lot.

These new facilities offer greater flexibility in the manufacture of a wide range of products on a mass production basis, Forsthoefel declared.

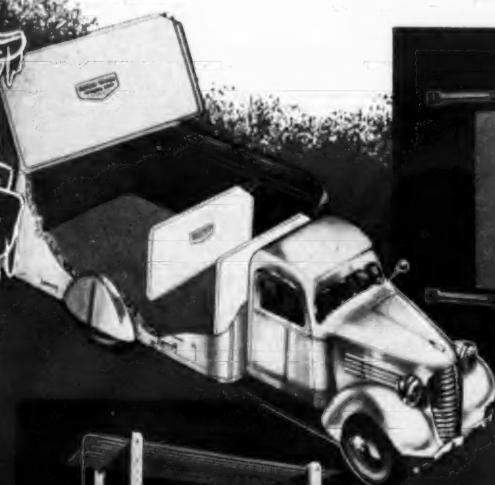
Proposed future expansion, now in the blueprint stage, anticipates the need for doubling present space, he added.

In the past five years, Revco has doubled its size and nearly quadrupled manufacturing output, he asserted.

The new engineering building houses two completely equipped temperature control rooms, one at 70° F. and the other at 110° F. Freezers taken directly from the production line are checked in both rooms. This is to determine how they will operate under normal temperatures and their performance at higher than normal temperatures.

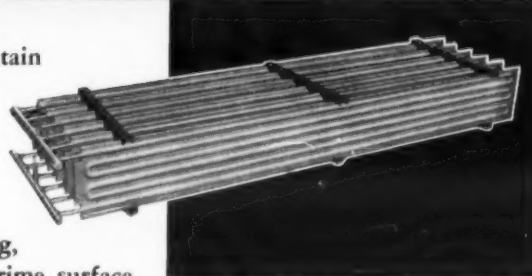
Tests are also conducted to determine temperature variations throughout the cabinet, percentage of time the unit must run to maintain 0° F., and the electrical power needed to maintain that temperature.

Let **KOLD-HOLD** show you  
the most efficient line  
of refrigeration products  
money can buy



Serpentine Plate Stands

Serpentine Plate Banks



There is a difference in the performance of Kold-Hold Refrigeration Plates that shows up in reduced operating costs. The difference is found in their greater efficiency . . . their ability to pull down larger loads, faster . . . using less power . . . at a lower cost to you.

This efficiency is readily apparent in "Hold-Over" Plates that maintain dependable, low temperatures in truck bodies for as little as 10c a day. Operated off the existing plant cooling system or by a condensing unit mounted on the truck, they hold predetermined temperatures throughout the longest day's hauls and reduce the cost of marketing perishable foods.

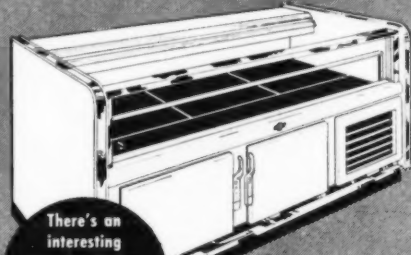
This efficiency can be seen in "Serpentine" Plates for quick freezing, chilling and holding. These plates have the equivalent of 100% prime surface because the refrigerant flows in a continuous pass formed in the plate itself. There is no internal tubing or piping. This exclusive "Serpentine" design in individual Plates, Plate Stands and Plate Banks assures you more efficient refrigeration . . . less trouble . . . lower costs! Send for full details today!

**KOLD-HOLD**

protects every step of the way



Serving America's  
Finest Food Stores!



There's an interesting story for dealers in "Bally MEANS BIG BUSINESS". Copies available

Automatic Self-Defrosting  
FROZEN FOOD CASE

with Big Lower Storage Section

...ONE OF 62 DIFFERENT  
BALLY MODELS and SIZES

**Bally**

REFRIGERATED DISPLAY CASES  
Bally Case and Cooler Co., Bally, Pa.





## Pleasant Place To Congregate

*Year-Round Air Conditioning and Efficient Fountain In Suburban Drugstore Keeps Customers from Going to Neighboring Community*

LINCOLN, Neb.—The recipe for successful operation of a new neighborhood drugstore is to make the store a pleasant place for members of the community to congregate, according to L. D. Penterman, youthful pharmacist who opened his pharmacy in suburban Bethany last October.

Prime requisites for such a store, he added, are year-round air conditioning and an efficient fountain department.

Bethany had been without a drugstore for over 15 years. Penterman decided that in order to compete with downtown drugstores and neighboring University Place, he would have to provide just as modern an establishment as the residents of his neighborhood were used to when they visited those other drugstores.

The first item of concern was an efficient and attractive fountain department that would be in balance with the 28-ft. by 60-ft. space of the pharmacy. An all-stainless-steel 12-ft. Bastian-Blessing unit was placed near the full-view glass front so that fountain patrons could see as well as be seen as they visited over their refreshments. Six stools upholstered in red to match the alternating red

and cream-colored panels of the front bar were installed.

Two refrigeration units and a carbonator were required for the fountain installation. One of these is housed in the fountain unit, while a matching 3½-ft. stainless steel shell was purchased and set in line with the fountain to house the second compressor and carbonator, thus providing more room for storage in the fountain unit.

The fountain provides refrigeration for the syrup and fruit dispensing compartments and for ice water, as well as conventional enclosed storage compartments. This extra refrigeration not only prevents spoilage and deterioration of the sundae toppings, but speeds up fountain service by doing away with the necessity of putting ice in drinking water, the druggist explained. The fountain also has a thermostatically-controlled germicidal sterilizer in the sink.

Expenses were trimmed by doing away with a wall fixture on the back bar. Instead a large mirror was mounted on the wall and flanked on both sides by large, framed pictures of the various ice cream specialties available at the fountain.

Another unit in the fountain de-

AIR CONDITIONING and an efficient fountain has made this drugstore the congregating place for folks in suburban Bethany, Neb. The town had not had a drugstore in 15 years so the owner decided if he was going to draw his neighbors back from other communities he must offer them a convenient, comfortable meeting place. Customer in background is serving herself from the ice cream cabinet.

partment wall line-up is a Weber display case for packaged ice cream. This fixture has recorded an increase in sales every month it has been in operation, despite a cold season to date.

Store-wide sales, including the fountain, have increased a conservatively-estimated 50% since the first of the year, but the take-out ice cream vending fixture has shown a gain of nearly 100%.

The druggist explained that Bethany residents had been in the habit of buying the take-home ice cream in a grocery store or an ice cream parlor, both located in the same block as the new drugstore. However, the modern reach-in fixture, located near the front window where all passersby could see it, has shown decided "sales appeal."

Due to the absence of basement facilities, all refrigeration and air conditioning units are self-contained. Heating is done by gas-fired blower-type fixtures suspended from the ceiling.

The store is air conditioned by a 5-ton Frigidaire unit mounted in the storage space back of the prescription department at the rear of the floor. It is high enough that the vent at the top of the unit is above the top of the prescription department display fixture, and serves to efficiently cool the small pharmacy without ductwork.

Penterman pointed out that the popularity of the fountain as a gathering place for the community has been due in large part to the air conditioning unit, while fountain and air conditioning have been an important combined influence on prescription department business. Prescriptions have increased over 100% since Jan. 1.

The modern appearance of the store and fixtures likewise have helped to effect a constantly increasing trade. The full-view front slopes in from top to bottom and the double doors are all-glass. There are no window displays to obstruct the view of the store interior from the street, although the ice cream vending case and fountain serve in effect as effective window displays.

Fluorescent lighting, acoustic-type ceiling, asphalt tile flooring to harmonize in coloring with the pastel green of the walls, and natural oak display islands and wall fixtures with adjustable shelves complete the modern layout. Prescription department is of open design.

### Stone Air Conditioning Forms

NEW YORK CITY—Formation of Stone Air Conditioning Co. here has been announced by James Saltzman. The sales and service firm is located at 267 W. 30th St., New York 1.

**AIRO** stands for

Fast, dependable, world-wide service. Refrigeration and Air Conditioning parts and supplies.

Write for current Catalog

**AIRO SUPPLY CO.**

2732 N. Ashland Ave., Chicago 14, Ill.

## Kane Succeeds Lewis In G-E Distributorship

PHILADELPHIA — George C. Lewis, president of the company that bears his name, has retired and passed the reins to William F. Kane.

Kane, who was formerly vice president and sales manager, now becomes president and general manager. Samuel A. Rogrove will handle sales.

The firm is regional distributor of General Electric air conditioning units and commercial refrigeration equipment.

Lewis founded the George C. Lewis Co. in 1913 and has been president since 1935. He will continue to act as a consultant.

Kane joined the firm in 1946. Previously he was sales manager of the firm's air conditioning division.

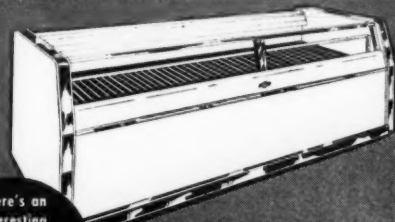
## Kelvinator Earnings Drop During Second Quarter

DETROIT—Nash-Kelvinator Corp. reports net earnings of \$3,099,509, or 71 cents per share, for the quarter ended June 30, 1951. This compared with \$4,554,442, or \$1.04 per share in the previous quarter, and \$10,052,117, or \$2.21 per share, in the June quarter last year.

Sales for the June quarter this year were \$107,120,691 compared with \$107,016,823 in the previous quarter, and \$132,829,364 in the June quarter a year ago. Earnings before taxes were \$7,447,509 compared with \$1,389,442 in the previous three months and \$17,551,117 in the like period last year.

Net earnings for the 9 months ended June 30, 1951, were \$12,735,063 compared to \$21,482,366 last year.

*Serving America's Finest Food Stores!*



There's an interesting story for dealers in "Bally Means Big BUSINESS". Copies available

OPEN STYLE Single Shelf Case Front and Rear Loading Models Canopy Available

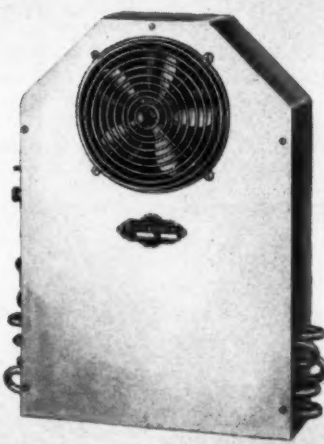
...ONE OF 62 DIFFERENT BALLY MODELS and SIZES

**Bally**

REFRIGERATED DISPLAY CASES Bally Case and Cooler Co., Bally, Pa.

## BETZ BEVERAGE BOX UNIT

FOR INSTALLATION EITHER ON REAR WALL OR EXTREME END



Circulation from top to bottom insures temperature even though the doors remain open. Extremely compact—Will increase bottle capacity of the cabinet.

MODEL NO.	BTU AT 1° TD	CFM	SURFACE SQ. FT.	DIMENSIONS		
				H	W	D
130-DB	130	210	37.24	24 3/4"	20 3/8"	5"
190-DB	190	310	61.83	24 3/4"	20 3/8"	6 1/2"
260-DB	260	425	77.25	24 3/4"	20 3/8"	8"

See Them at Your Wholesalers

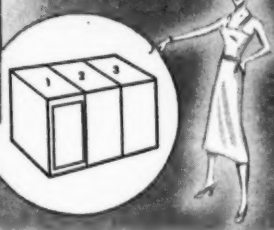
**BETZ CORPORATION**

HAMMOND • INDIANA



Now 3 ROOMS WITH 3 DIFFERENT TEMPERATURES in ONE!

- ECONOMICAL
- PRACTICAL
- ADVANCE DESIGN



NOW... the manufacturers of famous 'Kold-Draft products present the

**\* UNIFLOW**  
Walk-in Coolers

- Standard Temperature Coolers
- Multi-Temp Coolers
- Walk-in Freezers

TWO or three rooms with two or three different temperatures from -20° +40°; or whatever temperatures your customer needs!

UNIFLOW'S Multi-Temp Walk-in Cooler is practical and economical to install and operate. It requires only one condensing

A SECTIONAL WALK-IN COOLER FOR FOOD REFRIGERATION

unit, one blower unit, one expansion valve... and one refrigeration hookup.

The UNIFLOW line offers a truly generous value for every customer requirement. Write, wire or phone today for circulars, prices and dealer profit information.

\* Trademark Reg. U.S. Pat. Off.

**KOLD - DRAFT DIVISION**

UNIFLOW MANUFACTURING CO., ERIE, PENNSYLVANIA

KOLD-DRAFT KWIK-SERVERS KOLD-DRAFT KUBER MODELS KOLD-DRAFT "ELECTRIC-ICE" WATER COOLERS

KOLD-DRAFT BEVERAGE COOLERS KOLD-DRAFT CONSOLE CONVERTERS KOLD-DRAFT RUBER-SERVERS



## NARDA Dealers' 1950 Sales Top '49 by 23%, Stocks Rise 49% As Cost Ratio Declines and Profit Ratio Mounts, Survey Finds

CHICAGO—Dollar sales volume in 1950 was up 23% over 1949 for dealers participating in the fifth annual cost-of-doing-business survey conducted by the National Appliance & Radio Dealers Association, and the average dealer's inventory was 49% higher at the end of the year than at the start, an analysis of reports shows.

Among other survey findings were these:

Increases in dollar sales were shown by 81% of the dealers. In the 1949 survey, only 38% reported dollar sales increases over 1948.

Net dollar operating profit was reported by 92% of the dealers, compared to 87% in 1949. Net profit ratio to net sales for all reporting dealers amounted to 6%, against 5.2% a year earlier.

Gross margin and total operating cost ratio were the lowest of the five-year period covered by the NARDA surveys. Gross margin averaged 30.8% of net sales, or \$30.80 for every \$100 of net sales, compared to \$32.80 in 1949. Operating cost ratio was 24.8% of net sales, against 27.6% in 1949.

Inventory turnover went up to 4.3 times from the 3.8 of 1949.

A breakdown of 1950 sales by product types (see Table 1) shows the same order ranking as that for 1949. Refrigerators, with 28.3% of total sales, continued to lead the parade, followed by washing machines, television, ranges, radios, and vacuum cleaners.

However, the 1950 percentage share for each of the first six items, except radios, was larger than the 1949 share. On the other hand, total sales in the "Other Sales" bracket dropped from 27.9% in 1949 to 20.2% in 1950.

Despite the record 1950 TV year, refrigerators accounted for more than twice the dollar volume television brought in, the survey revealed. TV's share of the grand total was 13.7%, up 2.4% from the 11.3% of total sales in 1949. In 1948 TV represented 4.4%.

Freezers continued to get a bigger chunk of total sales. The 1950 figure was 4.7%, compared with 3.1% in 1949 and 2.5% in 1948.

Continuing the upward trend in evidence since 1946, trade-ins again increased in 1950 in per cent to total sales of four key products (see Table 2). Trade-ins accompanied 42% of refrigerator sales, 49% of washing machine sales, and 36% of both range and vacuum cleaner sales.

For the first time, the trade-in figure for television was included in the 1950 survey. Thirteen per cent of all respondents' TV sales involved a trade-in.

Participating dealers showed average sales per square foot of selling space amounting to \$74.69, compared with the average figure of \$73.20 for 1949, according to the survey report.

Commenting on the 49% increase in inventory, the report stated:

"This condition is at least partially

attributable to the searing squeeze brought on by Regulation W. At the end of 1949 the average NARDA dealer's inventory was 16% below the starting level for the year. These wide swings in inventory positions can mean the ruination of many businesses. A strong suggestion of the need for more efficient control on the part of individual operators is indicated by the results cited herein."

Turning to national operating ratios in 1950 (see Table 3), the report pointed out that "the achievement of a net operating profit ratio of 5.2% by the reporting dealers in 1949, by comparison with a 1948 ratio of 4.6%, was due mainly to a drop in the cost-of-goods-sold ratio sufficient to offset a rise in the total operating cost ratio."

"In 1950 the NARDA dealers achieved another rise in the average net operating profit ratio... but this was accomplished through a reduction in the total operating cost ratio sufficient to offset a rise in the cost-of-goods-sold ratio; in other words, the reverse of the 1949 development."

In connection with net sales, it was noted that revenue from service amounted to 7.4% of combined net sales in 1950, compared to 8.4% in 1949.

In 1950, the average NARDA dealer had a cost-of-goods-sold ratio of 69.2% of net sales, compared to 67.2% in 1949 and 68.7% in 1948. The 1950 ratio for this factor was the

Table 2—Trade-In Per Cent To Physical Unit  
Sales Of Key Items

Appliance	% Of Sales Accompanied By Trade-Ins				
	1950	1949	1948	1947	1946
Refrigerators	42	35	18	11	3
Washing Machines	49	41	27	19	4
Ranges	36	26	16	9	2
Vacuums Cleaners	36	31	22	26	10
Television	13	....	....	....	....

Table 3—National Operating Cost And Profit Ratios

	National Averages				
	1950	1949	1948	1947	1946
1. Net Sales*	100.0	100.0	100.0	100.0	100.0
2. Cost of Goods Sold**	69.2	67.2	68.7	67.0	66.1
3. Gross Margin (Line 1 minus Line 2)	30.8	32.8	31.3	33.0	33.9
4. Total Operating Costs (A thru E)	24.8	27.6	26.7	26.2	25.4
A. Administrative	16.9	19.1	18.6	18.2	18.0
(1) Owners' and/or Mgrs' Salaries	3.6	3.5	3.5	NS	NS
(2) Office Salaries	1.5	2.0	1.8	NS	NS
(3) Salesmen's Pay	4.8	5.5	5.5	4.8	4.8
(4) Servicemen's Wages & Expenses	4.5	4.7	4.7	4.1	3.3
(5) Delivery Expense	1.4	1.7	1.7	NS	NS
(6) Other Administrative Expense	1.1	1.7	1.4	NS	NS
B. Occupancy Expense	2.6	2.6	2.8	3.0	3.7
C. Advertising Expense	2.2	2.5	2.6	2.1	1.9
D. Bad Debt Losses	0.3	0.2	0.2	0.2	1.8
E. All Other Expenses	2.8	3.2	2.5	2.7	1.8
5. Net Operating Profit (L3 minus L4)	6.0	5.2	4.6	6.8	8.5

\*Includes revenue from service.

\*\*Includes cost of service parts and supplies.

NS: Not segregated in 1947 and 1946 survey schedules.

highest for any of the five years covered by the NARDA dealer surveys.

Total administrative cost ratio of the average dealer in 1950 was 16.9%, against 19.1% a year earlier.

The 1950 ratio was the lowest of the past five years. Lower administrative costs in 1950 compared with 1949 helped explain the lower of the overall cost ratio between these two years, it was stated.

Table 1—Appliance Sales Breakdown By Product Type

Appliance	Per Cent of Total Sales				
	1950	1949	1948	1947	1946
Total	100.0	100.0	100.0	100.0	100.0
Refrigerators	28.3	27.8	28.6	24.0	19.0
Washing Machines	18.6	14.1	16.9	18.0	16.0
Television	13.7	11.3	4.4	....	....
Ranges	12.4	10.0	12.2	13.0	12.0
Radios	4.6	7.2	7.8	17.0	17.0
Vacuum Cleaners	2.2	1.7	1.4	3.0	3.0
Other Sales	20.2	27.9	28.7	25.0	33.0
Freezers	4.7	3.1	2.5	....	....
Dishwashers	1.5	1.6	1.6	....	....
Ironers	1.1	1.6	2.0	....	....
Other Major Appliances	8.5	12.5	15.8	....	....
All Small Appliances	4.4	9.1	6.8	....	....
Electric Cooking Houseware	1.2	....	....	....	....

## SPECIALISTS in STAINLESS STEEL!

ROLL-FORMED AND STAMPED  
PRODUCTS

★  
FUNCTIONAL and DECORATIVE  
MOULDINGS  
STAMPINGS  
ASSEMBLIES

★  
COMPLETE FACILITIES FOR  
BUFFING  
ELECTROLYTIC POLISHING  
WELDING  
FORMING

★  
MORE THAN 30 YEARS' EXPERIENCE

★  
SKILLED ENGINEERING SERVICE

**JOHN  
LEES**

Write for catalog and  
recommendations. Prod-  
ucts manufactured to  
your specifications.

**JOHN LEES Division of The SERRICK Corp.**  
Kilgore Avenue Muncie, Indiana



**OASIS Electric**  
WATER COOLERS

**THE EBCO MANUFACTURING COMPANY**  
WORLD'S LARGEST MANUFACTURER OF ELECTRIC DRINKING WATER COOLERS  
GENERAL OFFICES & FACTORY  
401 WEST TOWN STREET  
COLUMBUS 8, OHIO, U.S.A.  
December 8, 1950

Mr. E. W. Seymour  
Morrison Advertising, Inc.  
1324 West Wisconsin Avenue  
Milwaukee 3, Wisconsin

Dear Mr. Seymour:

In answer to your letter requesting permission to feature EBCO products in your advertising for your client, UNITED MANUFACTURING & SERVICE COMPANY, Mr. Boeshaar, our Promotion Manager, has asked me what our experience has been with the Unilectric Wiring Systems and Components produced by your client. I thought perhaps you would be interested in my reaction.

We here at EBCO are as close to being 100% pleased with this source of supply as a customer ever gets. From my own personal experience, I can tell you that Unilectric wiring systems meet all OASIS material specifications for uniform, top quality. I know that the simplified design of the junction block has helped to speed up our assembly line.

Reports from our field men and data from our own testing lines prove that the Unilectric wiring systems give long and trouble-free service in OASIS Electric Drinking Water Coolers and Air Driers. Even to the extent of deliveries, United Manufacturing & Service Company has been "fast on its feet" in helping us meet changing production requirements and specifications for OASIS products.

Very truly yours,  
The EBCO Manufacturing Company  
*H. C. Fischer*  
H. C. Fischer  
Chief Engineer

This letter from The EBCO Manufacturing Co., Columbus, Ohio, reflects the enthusiasm with which UNILECTRIC Wiring Systems are regarded among more than 141 leading manufacturers today, including 65 manufacturers of refrigeration equipment. It costs you nothing to find out how UNILECTRIC — "Nation's Wiring Headquarters" — can serve you best, on your standard or defense products. Write for further details.

**UNILECTRIC**  
TRADE-MARK

**UNITED MANUFACTURING & SERVICE CO.**  
407 South Sixth Street, Milwaukee 4, Wisconsin

**DESIGNERS AND MANUFACTURERS OF UNILECTRIC WIRING SYSTEMS AND COMPONENTS**



## They'll Do It Every Time . . . . By Jimmy Hatlo



## Do You Have 'Both Feet On The Ground'?

He doesn't worry  
about the weather...



... his room conditioner is dependable because  
it is equipped with a **TECUMSEH HERMETIC**



Send for complete specifications  
on these 1/3, 1/2 and 3/4 H.P.  
air conditioning compressors.

Mark Twain said: "Everybody talks about the  
weather, but nobody does anything about it."

Today people are doing something about the weather—they are air conditioning their offices and homes for better working and living comfort . . . and if you are one of the manufacturers of these room conditioners, it will more than pay you to investigate Tecumseh's line of hermetics.

Built upon the idea that the refrigeration industry needed a smoother, quieter, more dependable unit, Tecumseh engineers have developed the Tecumseh Single and Twin Cylinder Hermetic Units and Compressors. Free from vibration because they are internally cushioned, these Tecumseh Hermetics bring to the air conditioning industry low-cost, high-capacity condensing units that develop peak performance with minimum size.

If you need a heavy duty compressor that will stand heavy loads under tough conditions, you can rely upon the complete year-in and year-out dependability of Tecumseh.



**TECUMSEH PRODUCTS**  
TECUMSEH, MICH. *Company*  
TECUMSEH PRODUCTS COMPANY, TECUMSEH, MICH.  
EXPORT DEPT.: 2111 WOODWARD AVE., DETROIT, MICH.

World's largest independent producer of compressors and condensing units for the refrigeration industry.

AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

Trade Mark  
registered  
U. S. Patent  
Office;  
Est. 1926



Copyright  
1951,  
Business News  
Publishing Co.

F. M. COCKRELL, Founder

Published Every Monday by BUSINESS NEWS PUBLISHING CO.  
450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$8.00. All other foreign countries: \$7.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

GEORGE F. TAUBENECK  
Editor and Publisher

PHIL B. REDEKER, Editorial Director

C. DALE MERICLE, Associate Editor

JOHN SWEET, Assistant Editor

HUGH MAHAR, Assistant Editor

GEORGE HANNING, Assistant Editor

MARGARET DEAN, Assistant Editor

Editorial Assistants: MARGARET

POMMERENING, BERNICE SHEPLOW.

E. L. HENDERSON, General Manager

ROBERT M. PRICE, Adv. Mgr.

ALLEN SCHILDHAMMER, Western

Adv. Mgr.

SHIRLEY J. HOY, Adv. Secy.

WALTER J. SCHULER, Production Mgr.

JOHN F. JOLIAT, Circulation Manager

Member, Audit Bureau of Circulations. Member, Associated Business Papers

VOLUME 63, No. 14, SERIAL NO. 1,168, AUGUST 6, 1951

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

## People Who Live In Glass Houses Should Practice What They Preach

"If we all work together as a team, if every one does his part, we can beat inflation, secure the defenses of this nation, and keep down the cost of living for the average family," declares President Truman.

"Buy only what you cannot do without—accept some reduction in our standards of living—make the most efficient use of manpower—require harder work and longer hours for everyone. . . ."

Harry wasn't just beating his gums when he said those things. He was right as rain. But what is his Administration doing about that sound advice? A good government should provide an example for the people it governs.

However, in one year, the army has bought 68,000,000 can openers for its 1,500,000 men; 60,000,000 gals. of paint in quart and gallon cans, which the suppliers argued, and the army admitted, cost less in five-gallon cans; 4,636,000 web belts of which one is issued per man per year; 11,753,000 pairs of boots when the total estimated consumption is 4,800,000 pairs; 1,917,000 lbs. of black pepper; 5,000,000 lbs. of margarine at 25½ cents a pound, while the government was selling Italy 5,500,000 lbs. of butter at 15 cents a pound.

Mr. Acheson's Department of State has asked the Congress to grant \$24,875 next year to buy luncheons for visiting foreign students. For the 175 luncheons scheduled, each for 14 to 18 persons, the average tab per person becomes \$8.73.

The Byrd committee of the Senate reveals that Federal civilian employees have been increasing by 1,870 per day, every day of the month. The Defense Transportation Administration, one of its officials disclosed, is "stockpiling stenographers against the needs of the future."

Chauffeurs in government employ now number 25,680.

A Senate armed service subcommittee found 95,784 officers and men in 16 basic training camps holding jobs that "certainly could be filled efficiently by limited service personnel, women, or civilians . . . Sitting at desks, working in kitchens, driving automobiles, operating motion picture machines, running px's, and doing similar jobs are nearly enough men to fill our (military) commitment in Europe."

As the Byrd committee has shown, these are just a few cases of labor hoarding, waste, and extravagance in government.

Mr. Truman tells us we must pay more taxes and bigger taxes as well as cut down our spending. If his government appointees would stop pampering their own appetites for spending our money so profligately, maybe we citizens would be more inclined to be frugal.

As it is, government is the worst offender of all, and the chief cause of inflation.

Let the Administration practice what it preaches.

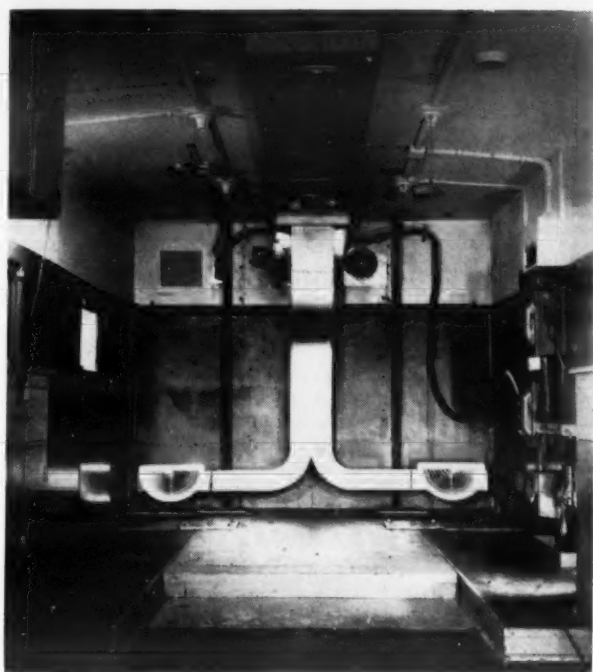
It lives in a glass house, and if people on the outside see waste and corruption on the inside. . . .



## Temperature, Humidity Control Paramount In Army Mobile Map Reproduction Unit



Both cooling and heating components are housed in the special compartment on top of the cab of this special U. S. Army map reproduction truck. Constant temperature and humidity control is necessary to provide high quality map reproduction work.



Interior of the Army map reproduction van, where diffusion of the air is accomplished by a system of air ducts and Anemostat air diffusers mounted on the ceiling and along the front panel of the van. The system can be regulated to provide the mixture and circularization of air desired.

FORT BELVOIR, Va.—Development of a complete system for heating, cooling, and ventilating map reproduction trucks for the U. S. Army is credited to Anemostat Corp., which has been working on the project since June of 1947.

Major components of the heating and air cooling systems are mounted over the cab in an aluminum shell constructed over welded steel structural supports. Ventilating system is located within the van itself.

Map reproduction by the lithographic process in arctic areas presents some major problems for our Armed Forces, the foremost of which is maintaining the necessary range of temperature and humidity within which operations must be carried on. In fact, no matter where reproduction equipment is set up, if the working temperature is allowed to

drop below 50° F., the reaction of chemicals slows up, equipment gets too cold to operate and the efficiency of operators is greatly lessened.

If the temperature drops much lower, photographic and lithographic reproduction become practically impossible.

Reproduction trains required for the production of military maps in the field are composed of a number of individual vans each housing equipment required for one or more of the component steps of the lithographic process such as the camera section, plate processing and map layout.

To assure maximum efficiency and quality it was necessary to develop a satisfactory means of maintaining constant temperature and humidity control under a wide range of conditions within each van.

The new design adequately handles the situations under which the vans must operate. At temperatures down to -70° F., the heater can be started and operated with 110 volt a.c. power and will heat the van interior to 65° F. within one hour from the initial cold start using 100% ambient fresh air. Recirculated air can also be used or a mixture of both fresh and recirculated air. Power from 24 volt batteries can also be utilized, where necessary.

Under test, the entire unit was subjected to temperatures of -40° F. at Fort Churchill, Canada, to temperatures of -65° F. in the cold test chamber at Eglin Field, Fla., and to temperatures of -70° F. in the cold test chamber at Fort Belvoir, Va. In all of these severe climatic extremes the unit continued to operate efficiently.

The heating system utilizes an S-200 series Janitrol gasoline-burning aircraft heater. This and the air-cooling components are encased within the same housing except for the control box containing the compressor motor starter which is mounted within the van body.

An axial flow blower, driven by a 1/4-hp., 24-volt, d.c. motor serves in the heating cycle and for the cooling cycle air supply. With an output 70% greater than the previously

issued air conditioning units, this device maintains temperatures within the maximum limit for efficient operation of motorized map equipment.

Diffusion of cool or hot air is accomplished by a system of air ducts and Anemostat air diffusers mounted on the ceiling and along the lower front panel of the van. The system can be regulated to provide the mixture and circularization of air desired. This method provides uniform heating of the van interior from floor to ceiling with no stratification or layering of air. The cooling system, like the heating system, is thermostatically controlled.

Safety was one of the major considerations in the design of the heating system for the mapping unit. Since the heater draws its fuel from the truck gas tank, the danger of fire caused by filling conventional heaters is eliminated.

In addition to this, the combustion chamber is equipped with a safety drain which prevents the accumulation of unburned gas. A drainage line extends from the heater down to the chassis of the truck, discharging its contents, if any, onto the ground.

Danger of carbon monoxide being introduced from the heat exchange chamber or from the exhaust of the heater into the van body has been minimized. As an additional safety factor, the heater is capable of unattended operation through the use of thermostatic controls.

The gasoline-burning aircraft heater uses gasoline which is supplied from the truck gasoline tank and is piped to the heater through either of two separate fuel systems. Operation can be switched from one fuel system to the other from within the van, and, by proper use of the manually operated shut-off valves, either one of the complete systems can be removed for repair while the unit is operating on the other.

The combustion chamber is so ar-

anged that a spinning action is imparted to the flame. The spinning air, intermixing with the atomized fuel at the point of ignition, produces a whirling flame which is stable and sustains combustion under the most adverse conditions because it is whirled around itself many times. Thus, ignition is continuous and the combustion process "self-piloting."

The combustion chamber and heat transfer section is of sufficient capacity to provide a maximum 200,000 B.t.u. per hour output depending upon the fuel and combustion air rate. However, the requirements for military mapping require only 50% of the maximum output or 100,000 B.t.u. per hour. Use of the oversized combustion chamber is expected to increase capacity if needed.

**Instantaneous  
Draught Beer Cooler**  
refrigerated faucets!

**Speed-Freeze**  
draft and  
bottle beverage  
coolers

write

**IDEAL COOLER CORPORATION**  
2953 EASTON AVE., ST. LOUIS 6, MO.

## WOLVERINE COPPER TUBING *first* ON D.O.

but we're not forgetting YOU

Copper and copper base alloy tubing is specified on many Defense Orders. Wolverine tubing is often selected because it is, as you know, quality-controlled from ore to finished product and, therefore, conforms to the high standards that must be met.

Incidentally, Wolverine has been manufacturing copper and copper base alloy tubing for well over thirty years.

But like all other manufacturers, we are cognizant of the division of our obligations. Your needs, too, are recognized. Not all the copper tube we produce daily is earmarked for emergency use. The maximum percentage allowed by government regulations is being produced to take care of essential domestic needs—your other needs.

Whatever tube you can get, utilize it to the best advantage. Employ it judiciously and we shall all get along very well until the emergency is over.

**WOLVERINE TUBE DIVISION**  
Columet & Hecla Consolidated Copper Company  
INCORPORATED

Manufacturers of seamless, non-ferrous tubing  
1413 CENTRAL AVE. • DETROIT 9, MICH.

Sales Offices in Principal Cities

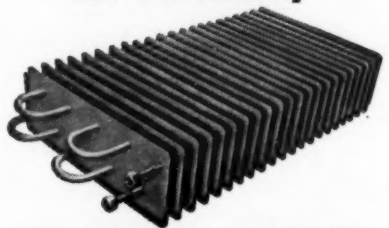
Plants in Detroit, Mich. and Decatur, Ala.

Wolverine Mill Depots:

DETROIT, MICH. • DECATUR, ALA. • HOUSTON, TEXAS • LOS ANGELES, CALIF.  
LONG ISLAND CITY, N. Y. • PHILADELPHIA, PA. • PROVIDENCE, R. I. • ST. LOUIS, MO.

Export Department 13 E. 40th St., New York 16, N. Y.

### LOOK to LARKIN for Durability



#### THE ORIGINAL, PATENTED CROSS-FIN COIL

The refrigeration coil that changed an industry stands today unchallenged for performance, user satisfaction and lasting durability. Made from only the finest materials by skilled craftsmen under exacting standards, every Larkin Coil features imbedded fin-to-tube contact, swaged connection, silfos welded construction, and staggered tubing. Write for complete details.

Manufacturers of the original Cross-Fin Coil — Humi-Temp Units — Evaporative and Air Cooled Condensers — Air Conditioning Units and Coils — Direct Expansion Water Coolers — Steel Vacuum Plate Coils — Heat Exchangers.

WATCHDOG OF THE NATION'S FOOD SUPPLY

**LARKIN COILS**  
519 MEMORIAL DR., S.E. • ATLANTA, GA.

### Do you use shafts?

Send your shaft problems to us! For more than 20 years we have been making precision shafts of all types for air conditioning and refrigeration compressors. We offer you the experience, the skill and the facilities to produce exactly the kind of shaft you need. Send blueprints for quotations on any type of shaft you may need.

**MODERN MACHINE WORKS, INC.**

5354 S. Kirkwood Avenue

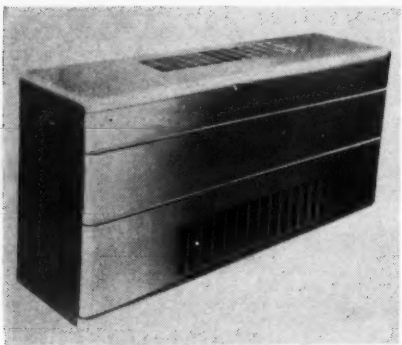
Cudahy, Wisconsin



# What's New

When requesting further information on new products, please use "Information Center" form.

## Air Conditioning Unit Designed for Operating Rooms



KEY NO. A-810

LA CROSSE, Wis.—A hospital operating room air conditioning unit—designed for use in hazardous gas atmospheres and other special requirements—has been introduced by The Trane Co., here.

Safety provisions in the design in-

clude provision for drawing 100% of the conditioned air from the outside, and adequate coil and humidifier capacity to permit wide latitude in the precise control of both temperature and humidity throughout the year.

The hospital unit has an explosion-proof motor (Class C ether) and spark-proof fans, fan belts, wiring, and switches.

Made in four sizes, with capacities from 200 to 800 c.f.m., the floor type units provide both heating and cooling. All outside air is conditioned when the fans of the unit are running. If the fans are off, a damper arrangement shuts off all outside air and allows the reheat coil and cabinet to function as a convector.

A pneumatic control system controls the unit so that optimum conditions are maintained at all times. Trane bulletin D-398 describes the operating room unit.

## 'E-Z Way' Coffeemaker Uses Liquid Concentrates



KEY NO. A-811

CEDAR RAPIDS, Iowa—Up to 300 cups an hour of fresh, uniform coffee are said to be dispensed by a

new automatic coffeemaker which uses liquid coffee concentrates.

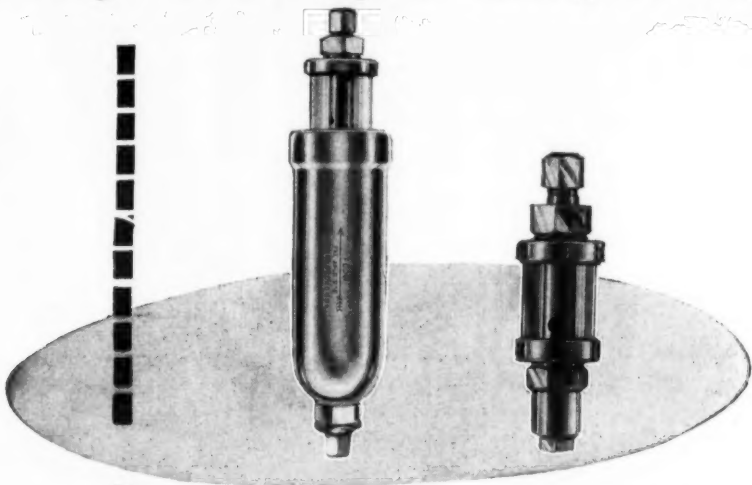
The unit cuts operating costs of eating places by reducing labor and eliminating coffee waste, it is claimed by the manufacturer, Steel Products Co. here.

This "E-Z Way" coffeemaker connects to the water supply and the electric outlet. A patented self-cleaning measuring and mixing faucet dispenses "the same quantity for each cup so that each cup is fresh and uniform," according to the company.

It was pointed out that the unit eliminates handling hot water, waiting for coffee to brew, and cleaning up coffee grounds. There is no urn bag, filter or coffee brewer to wash, and waitresses are not tied up at the coffee urn, the manufacturer noted. The unit has no open flames and is fully insulated.

Price of the coffeemaker is \$157.75.

## PROMPT DIAGNOSIS—NO LEAKS... every service job satisfactory



### Makes Trouble VISIBLE

You don't guess — you KNOW — what is wrong, instantly, when you use Cee-Kleer, the only combination Sight Gauge-Drier on the market.

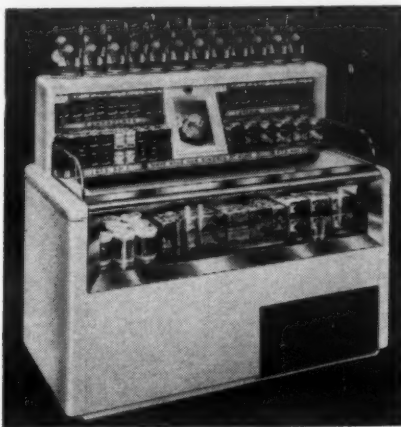
There's no searching in the dark because Cee-Kleer gives full 360° vision for fastest diagnosis of all operating troubles.

Cee-Kleer Driers trap sludge, wax, moisture and fine foreign particles. They are easy to clean and refillable — and there's not a *leaker* in a carload of them. Use this Cee-Kleer combination sight-drier on your next service job. Believe me, you'll continue using them to make every service job satisfactory.

Ask your Distributor for Cee-Kleer  
If he cannot supply you, just use the handy coupon and we'll be glad to send you any size you need until your distributor's stock arrives.

**Cee-Kleer**  
PRODUCTS, INC.  
947 W. Sixth Street  
Cincinnati 3, Ohio

Please ship.....Cee-Kleer Sight-Driers; size.....  
My Distributor is.....  
Name.....  
Address.....



## Weber Introduces Smaller 'Display-Rite' Cabinet

KEY NO. A-812

LOS ANGELES—The response to the Weber Showcase & Fixture Co. "Display-Rite" ice cream and frozen food case, introduced in 1950, has resulted in the expanding of the line to include the new model RCD-2062.

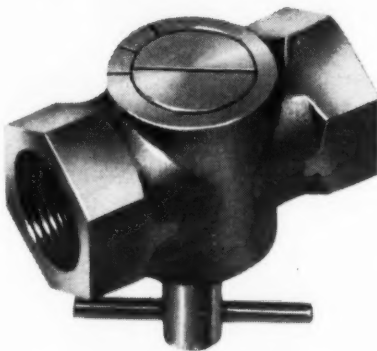
It is a smaller version, identical in other respects, to the original model RCD-2059.

Big feature of the Display-Rite case is the "related-item superstructure" which provides more selling space in the same floor space.

From related items such as toppings, nuts, cookies, seasonings, etc., displayed on the two upper shelves and the superstructure top can come increased profits and also added volume for the frozen food or ice cream displayed within the case proper.

A special candy superstructure is available for both models of the Display-Rite.

## Reynolds Valve Features Deluxe Stop Cock



KEY NO. A-813

DETROIT—A flow-regulating valve that is designed for use where the exact setting of regulated flow of liquids is desired has been introduced by the Reynolds-Shaffer Co. here.

Called the Reynolds flow regulating valve, the deluxe stop cock is guaranteed, due to "O" ring packing not to leak externally. Exceptionally close fitting permits only the slightest weeping, the manufacturer said. In spite of this close fit, the plug turns easily for accurate manual adjustment without the use of tools. A quarter turn opens or closes the valve.

Made to fit 3/4-in. pipe, the valve is 2 1/2 in. long. It is made in two different types, one (R-V 1) full ported with area of 1-in. pipe in port, and the other (R-V 2) with 1/4-in. port for fine adjustments. The latter may be used in place of a needle valve.

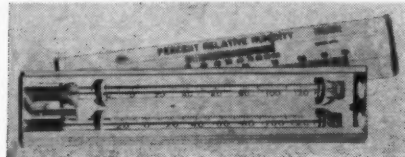
The valve can be assembled or disassembled in 30 seconds.

The manufacturer said that the valve would be produced in larger sizes for special applications if desired. The valve's special features are covered by patent applications, according to the company.

A detailed bulletin giving complete information and specifications on the new Reynolds flow regulating valve is available.

**WE WILL BUY!**  
**AIR CONDITIONING**  
**UNITS**  
**1/2 hp or Larger**  
**ANY QUANTITIES • MUST BE NEW**  
Write, Phone Or Call For  
**IMMEDIATE ACTION**  
**TRACO Industrial Corp.**  
455 W. 19 St., N. Y. 19, WATKINS 4-4302  
(Send for Traco's complete list of sensational bargains)

## Pocket Humidicator Is Shorter Than Pencil



KEY NO. A-814

NEWARK, N. J.—A precision pocket instrument, shorter than a pencil, that shows relative humidity by the wet-and-dry bulb method has been developed by the Weston Electric Corp. here.

Known as the "Tag" Pocket Humidicator model 8704, this compact instrument can be used either in the hand or mounted on a wall. A built-in slide rule converts the wet-bulb and dry-bulb readings direct into relative humidity, eliminating charts or tables.

This Humidicator consists of two etched scale glass thermometers, individually hand-calibrated for permanently accurate readings.

The psychrometric slide rule forms the cover of the case. For use, a few drops of water are applied to the thermometer wick, and the instrument is fanned or swung for several moments. Setting the wet-bulb reading opposite the dry-bulb reading then indicates relative humidity.

## Finish For Polystyrenes Doesn't Craze or Crack

KEY NO. A-815

CHICAGO—Development of a new coating for polystyrene plastics said to give a finish almost as brilliant as plating or metalizing, was announced here recently by M. A. Self, president of Bee Chemical Co. Samples are now available to manufacturers.

The new coating, Logoquant R 2513, is used as a carrier either for bronze or aluminum powders and is specifically designed for application on the reverse side of clear plastics. After preliminary testing by producers of refrigerators, thermostats, and other products, the new coating has been found not to craze or crack strained pieces, while retaining properties of good adhesion, abrasion resistance, color fastness, and resistance to cold and heat.

In addition to the new metallic base Logoquant R 2513, Bee Chemical also announced a new service in the industry—that of supplying bronze or aluminum mixed Logoquant tailored to customer specifications.

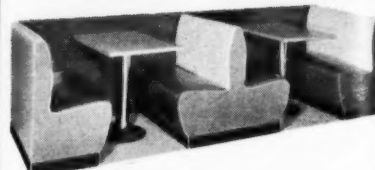
"In our laboratory work on the new Logoquant R 2513," said Self, "we were especially anxious to develop a polystyrene finish which could be used with metallic powders and give excellent leafing qualities, hence adding brilliance to the article."

"We found that most finishes using bronze or aluminum powder forced the powder particles to stand on edge, thereby reflecting little light and hence producing a dull finish."

"After considerable experimental work, we were finally able to produce a coating which allows the metallic particles to lie down, giving an underside finish almost as brilliant as plating or metalizing, and far less expensive."

For those manufacturers who do not want to mix their own bronze or aluminum coating, Bee Chemical now will mix the materials to any specifications. The colors here include not only bronze and aluminum, but range from brilliant metallic blue to shining metallic red. These are all specially designed for the reverse side of clear plastics.

## CHROME FURNITURE at LOW...LOW PRICES



Booth Illustrated

single \$39.50 list

double \$59.50 list

wall panel \$22.00 list

BIANCO manufactures quality chrome furniture at prices that command fast sales action. A complete line from de luxe to economy. Booths . . . settees . . . tables . . . wall panels. Upholstered in rugged Duran for long life.

write for illustrated catalog



2736 VICTOR STREET ST. LOUIS, MO.

## Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

### What's New or Current Literature Available

Key No. .... Key No. ....  
Key No. .... Key No. ....  
Key No. .... Key No. ....  
Key No. .... Key No. ....

### Products Advertised

(list name, page, and issue date)

(PLEASE PRINT PLAINLY)

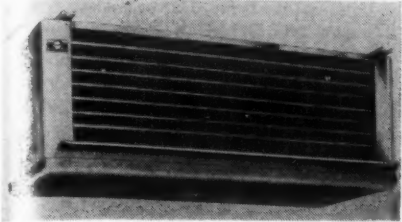
Name ..... Title .....  
Company .....  
Street .....  
City ..... Zone ..... State .....  
Type of Business .....

MAIL THIS FORM TO  
AIR CONDITIONING & REFRIGERATION NEWS  
Reader Service Dept.,  
450 W. FORT ST. DETROIT 26, MICHIGAN



## What's New (Cont.)

### York Unit Coolers For Below Freezing



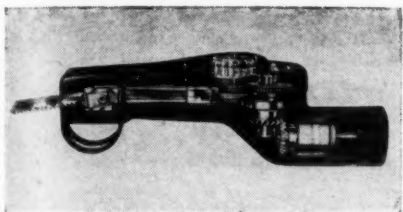
KEY NO. A-816

YORK, Pa.—Seven models of low-temperature unit coolers using ammonia refrigerant and seven similar models using "Freon" have been placed into production by York Corp., according to John R. Hertzler, vice-president and general sales manager.

The new units are for applications requiring below freezing temperatures such as, frozen food storages, fur storages, meat packing plants, and ice cream plants.

Hertzler pointed out that these units are compact and provide rapid defrosting by water spray. Unit coolers may be used in multiple where greater capacity is required, he noted.

### Model T Super-Saw Has Many Improvements



KEY NO. A-817

JOLIET, Ill.—Improved performance through a number of design changes are claimed for the model T Super-Saw manufactured by the R.C.S. Tool Sales Corp. here.

Although the Super-Saw measures only 10 1/2 in. over-all, it is designed as a heavy or constant duty power tool for use in field and shop.

Improvements include a new one-piece heat treated, alloy steel piston with separate clamping jaw, hardened

"Gleason Cut" drive gears insert type piston bearings, a one-piece connecting rod with 30% more bearing area, complete sealing against grease leakage, new grip, and a redesigned shank on the "Vise-Lok" Super-Saw blades to prevent slippage or chatter.

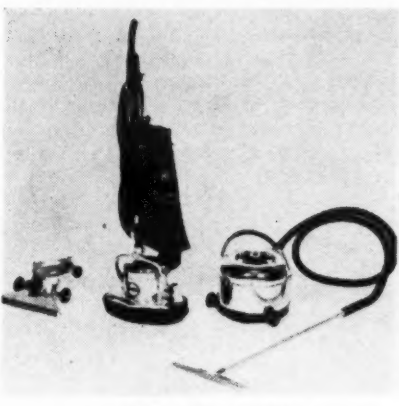
Like previous models, the new Super-Saw needs no starting hole whatsoever. This speeds up all types of key-hole or other sawing. Held tightly against the material to be cut, with the guide used as a fulcrum, the tool is "rocked" into an upright position and then guided along the cutting line.

A built-in blower keeps the entire mechanism cool and also blows chips and sawdust away.

Power is provided by any heavy-duty 1/4 in. or 5/16 in. electric drill, or by air drill or standard flexible shaft equipment.

Complete information and prices are available.

### New Floor Maintenance System 'Duz' Everything



KEY NO. A-818

NEW YORK CITY—Offered by Columbus Dixon, Inc. here, is a complete floor maintenance system centered around a single machine which is claimed to "do all the cleaning jobs that must otherwise be performed manually or by a number of different machines."

For use on all floor surfaces, the system consists of a set of "instantly" interchangeable units built around one basic electric motor unit. The latter fits into attachments for suction floor polishing, floor scrubbing, suction floor drying, suction cleaning, and dusting.

The Columbus system of polishing is said to provide all the normal advantages of mechanized floor polishing plus suction removal of all dirt and dust. Polishing is done by two large, high-speed brushes.

For scrubbing, the operator changes the polishing brushes for a pair of bristle scrubbers, detaches the dustbag, and closes the "exhaust." For drying, the motor unit is locked to the floor drying attachment, and its suction draws all water and dirt into the tank.

During vacuum carpet cleaning, the suction action, aided by "gentle" brush agitation, "eases dust and dirt up out of the deepest pile." Dusting accessories remove dust and dirt from carpets, upholstery, cupboards, pictures, etc., de-moth clothes, and purify room atmosphere by odorization, according to the company, while a spraying attachment can be used for paint, polish, carpet shampoo, and other purposes.

Special features are listed as a double-seal dustbag; a 1/2-hp. motor, self-ventilating and radio-suppressed; and an illuminator.

## Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

### 2-Color Folder Tells About Oasis Water Coolers

KEY NO. M-810

COLUMBUS, Ohio—A new 8-page folder in two colors gives a complete story on "Oasis" electric drinking water coolers manufactured by Ebco Mfg. Co. here.

The folder illustrates and gives general specifications for all Oasis models and gives individual specifications for each of the 12 water coolers in the line.

Models covered include: two bottle water coolers requiring no plumbing installation; two water coolers with freezing compartments; 5, 10, and 20-gal. capacity coolers; an air-sealed cooler and an explosion-proof water cooler.

One full page is devoted to a cut-away view of an Oasis water cooler in any Season with a Steinhorst Freezer," depicts the complete Steinhorst line of freezers, both the deluxe and the lower priced "Challenger" models.

### Kramer Trenton Issues Catalog of All Products

KEY NO. M-811

TRENTON, N. J.—Kramer Trenton Co. has announced publication of its new refrigeration equipment catalog No. R-225.

Numbering 52 pages, it is the largest catalog ever published by Kramer Trenton and includes illustrations and drawings of all Kramer products.

A special engineering section permits rapid selections for 35° F. temperatures as well as for low temperatures of 0° to -20° F. Reference to this section makes possible immediate and accurate selection of equipment without the use of a pencil, the company said.

Kramer's condenser line has been enlarged to include cooling towers and Kramer's "Unicon"—remote-type air-cooled condenser—extended up to 10 ton per single unit. Kramer's line of condensers now includes water-cooled condensers, air-cooled condensers, Unicons, cooling towers, and evaporative condensers.

Another section is devoted to four complete lines of units designed for walk-in boxes. These include the "Kay-Tee," "Coolmaster," "Radial," and "Large Curvette."

For reach-in boxes, Kramer presents six differently designed units to fit various applications. These are the "Bird Cage," "Small Curvette," "Panel Unit," "Stub Panel Unit," "Mullion Panel Unit," and the "Double Discharge Unit."

Kramer's "Thermobank" line has been expanded to include two new small units for applications in the 50 to 150-cu. ft. fixture.

The Kramer comfort cooler, added to Kramer's air conditioning line, is designed to answer the demand for low cost air conditioning. It is produced with a standard size throw-away type filter.

Measurements, capacities, and application data are furnished in complete detail, together with performance data and other general information.

### Westinghouse Hermetic Compressors Described

KEY NO. M-812

BOSTON—A descriptive folder on the Westinghouse line of hermetic refrigeration compressors of 2 through 7 1/2 hp. was published recently by the air conditioning division of Westinghouse Electric Corp.

The bulletin, labelled DB 101-110, pictures and gives construction features of the compressors along with dimensional drawings and condensed specifications.

### Steinhorst Booklet Covers Complete Freezer Line

KEY NO. M-813

UTICA, N. Y.—A new four-page freezer catalog, "Pick of the Season in any Season with a Steinhorst Freezer," depicts the complete Steinhorst line of freezers, both the deluxe and the lower priced "Challenger" models.

Complete specifications, test results, and features are explained. Particular emphasis is placed on the

exclusive Steinhorst "D F P" or "Dutch" freezer plates which hold the cold like a Dutch oven holds the heat. A second catalog, "Protect your Investment from Pasture to Profits with a Steinhorst Milk Cooler," describes the complete lines of both the Steinhorst spray-type, side-opening models, and the standard immersion type models.

Newly introduced into the catalog is the Steinhorst dry storage milk cooler for dry refrigerated storage of milk that has been initially cooled over a surface cooler (aerator). This milk cooler can also be used to provide dry refrigerated storage for ice cream mixes, beverages, etc.

Also new is the Steinhorst "Kool Kwick" spray system. Designed for the Steinhorst immersion type milk cooler, it will fit in any standard immersion type cooler.

### Hilsch Vortex Tubes Cataloged by Thermo

KEY NO. M-814

BELMONT, Calif.—Three models of Belmont Hilsch Vortex Tubes are cataloged in a new leaflet, Form V-2-551 put out by Thermo Instruments Co. here.

Text describes the use, in these devices, of an internal vortex to separate a flow of compressed air (or other gas) into hot and cold fractions which can be used in a wide variety of ways for calibrating instruments, cycle-testing equipment, cooling thermocouples, etc.

Operating-characteristic curves are provided to show temperature drop below that of inlet air over a range of 15 to 82° and rate of flow for various input pressures.



## International acceptance!

Thousands of ACE low temp cabinets  
in use throughout the world

WORLD-WIDE acceptance of ACE equipment was not accomplished overnight. This took years. We built our cabinets with the full confidence that they would do the selling job for you. The name "ACE", is a respected brand, internationally recognized as THE cabinet that represents all 6 vital factors that make for a perfect unit . . . 1—design, 2—styling, 3—engineering, 4—construction, 5—performance, 6—price.

Literature of the complete ACE line is available on request.

**Ace Cabinet Corp.**  
New Bedford, Mass.

Please address all inquiries to: Exec. Sales Office:  
1457 Broadway • New York 18, N. Y.  
Export Dept.: 39 Broadway, New York 6, N. Y.

Manufacturers of Frozen Food Display Cabinets, Ice Cream Dispensing Cabinets, Farm Freezers and Bobtails.

for more  
**Ice Maker  
SALES**

... FILTRINE  
**"Taste-Master"  
Demineralizer**  
in the water line

Cuts Service  
No Tastes  
Clear Ice  
Fits All Makes  
Small Cost

Crystal ice . . . without sludge-forming rust, sediment, mineral residue . . . chlorine taste . . . "milky" taste. Ends major source of service calls. Write for new literature.

**Filtrine**  
"Water Filters and Filters for 40 Years"

**FILTRINE MANUFACTURING CO.**  
BROOKLYN 5, N. Y.

"Don't give me any guff about substitutes, son—give me a genuine Ranco control!"

**Ranco**  
WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

Smart servicemen don't take kindly to makeshift controls—not when they know they can rely on Ranco for the right control for any refrigeration job. Whether you're working on a commercial installation, a household refrigerator, a water cooler, or a milk cooler, your Ranco wholesaler has the replacement control you need.

And Ranco—the world's largest manufacturer of refrigeration controls—has increased plant capacity, to meet the constantly increasing demand for genuine Ranco controls.

REPLACE IT RIGHT WITH RANCO

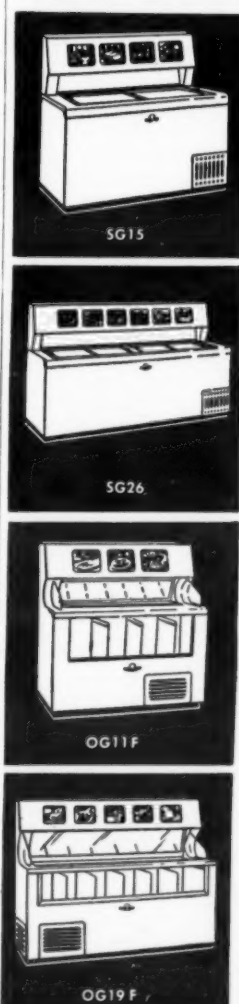
Want to know which control to use?  
This book gives you a quick answer.  
See it at your Ranco wholesaler's.



**Ranco Inc.**

COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS





## Traffic-Drawing Service Dept.

### It Needs Accurate Records, Incentive Plan, And Good Employee Relations To Thrive

By John O. Sweet

CHICAGO—Key factors in the service department program of Wallace Johnston Appliances, Inc., Memphis, Tenn., are accurate records and reports, incentive plans, fair treatment of employees, and personnel training.

Details of the program were outlined by Wallace Johnston, veteran retailer, at the recent mid-year meeting here of the National Appliance & Radio Dealers Association.

Johnston believes that dealers should make plans now for enlarging both their repair shops and parts departments "because in the days of scarcity ahead the dealer will need ample room for doing repair work and refinishing work as well as increasing his sales."

#### SOURCE OF REVENUE AND FLOOR TRAFFIC

"It is my experience from the past war that if a dealer can build up a parts business he will have a source of revenue along with floor traffic that will buy anything which he offers for sale on his floor," he stated in a paper prepared for presentation at the meeting.

"Our parts department has grown considerably to where it is a nice business within itself. It is also a means for getting an average of 40 to 50 people in our store daily."

"I would suggest that you dealers give your parts department a lot more time and a lot more study to see the possibility of sales potential that it has to offer."

"The repairing of appliances is a growing business today because of the high saturation of some appliances, and the life expectancy of some appliances is still an unknown factor."

"We find that repair work done in our shop within our building is more profitable than repair work done in the customer's home. Naturally we have a better control over our men and their time on productive work than the outside repair service where we have to drive great distances and take losses due to people not being at home or the inability of our trucks to carry the proper parts inventory."

"A good repair department within

a dealer's building builds confidence in the buyer of used appliances because he can see the shop with his own eyes and have confidence in the reconditioning or rebuilding of an appliance.

"We have a used display room in front of our shop and beginning 3 ft. from the floor to a height of 8 ft. we have 5 ft. of windows about 25 ft. long to show our repair shop in the background."

"We are able to sell our reconditioned appliances at a good price and make money on each because we have the shop in the background with the mechanics working to prove the sales point our salesmen make about our reconditioning of every used appliance."

"The successful appliance dealer of tomorrow will have to learn to recondition and resell his trade-ins if he expects to make a success out of his operation."

"We keep close records of our service operation so that we have a complete analysis of each operation by products as well as by the individual mechanic."

#### RECORDS SHOW WHERE PROFIT IS

"By having these records we soon learn what is profitable work and what is not profitable. This helps us to know how to advertise and promote the sale of profitable work and to run specials on it out of season to help defray our service department expenses."

"Records also give us an analysis of each mechanic's production. We have daily reports from each mechanic to let them know individually what they are doing, and total their reports so they know how they stand on a weekly and monthly basis."

"These daily reports are gone over in a group each Friday morning at which time we have a service meeting. Each man then knows his standing in relation to the other men and with the contests and rivalry we set up, we have a competitive spirit just as we do in our sales department."

"With these reports the men know each month how they stand on the

monthly bonus incentive plan under which we pay for labor over and above their salary and car expense.

"For example, if we pay a mechanic \$60 a week, we set up his labor quota for the month at \$600. We arrive at it this way: 4 1/2 weeks times \$60 is \$270, plus truck expense of \$100—making a total cost of this mechanic to the store of \$370. We feel that we are entitled to 40% on his labor so we set up a quota of \$600 labor for him."

"He is given credit for all warranty and installation calls at the rate of \$3 each. On out of warranty work he is given full credit for whatever he charges. Our rates are \$3.50 minimum per call and \$3 per hour after the first hour's work."

#### HOW INCENTIVE PLAN WORKS

"The incentive plan is this: We share 50-50 with him all labor that he does over \$600. This gives each of the men extra money in their rush seasons for their production during our rush periods. In this way the men share in the work at the same time the firm is getting the work."

"We keep our mechanics sales-minded by giving them a reward for each prospect they turn in who is sold. This applies only to straight sales and not to trade-ins."

"I buy a punch board with 50 punches in it. We use silver dollars always on this punch board. The men have a lot of fun drawing and kidding each other and carry the silver dollars around with them for weeks."

"My servicemen and parts men have all been with me over a long period because I treat them fairly and squarely. They are all furnished uniforms, given employment on a year-round basis with two weeks' paid vacation, paid when they are off sick, given sick and hospital insurance, plus the privilege of purchasing the merchandise we sell at 10% over cost."

#### CHRISTMAS BONUSES

"Each year for the past 15 years we have been able to give them Christmas bonus checks based on their time of employment and their production ability. This in most cases is in excess of 10% of their salaries."

"We are constantly trying each Friday in our meetings to better train these men who contact our customers and tell them our policies and why we have them. This has saved us a lot of money on various jobs, poor collections, credit losses, etc."

"We are constantly striving to help them with better tools, modern methods, and good equipment, to make their work more productive."

"I feel that all of this is sound and fundamental. If we give good service to our customers to the best of our ability, we will get good repeat business from them in years to come on service, parts, and new appliances."

#### LeFevre, Ellwood Appointed By Temperature Controls Div.

MILWAUKEE—Two new field representatives have been added to the sales staff of the Temperature Controls Division of Perfex Corp., according to V. P. Black, vice president of Perfex.

George A. LeFevre of Philadelphia is newly-appointed district representative for the New England and Middle Atlantic states. William O. Ellwood of Hamburg, N. Y., will serve the Buffalo area as district representative.

REFRIGERATOR DOOR GASKETS

JARROW PRODUCTS

Pocket GASKET SELECTOR

ACTUAL SIZE CROSS SECTIONS

Free TO SERVICEMEN AND CONTRACTORS

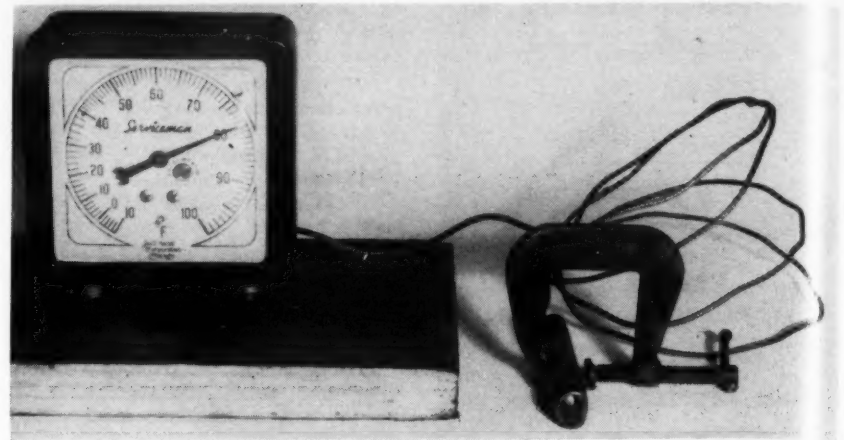
Get your Gasket Selector from your Wholesaler or write:

JARROW PRODUCTS

201 NORTH LA SALLE STREET • CHICAGO 10, ILL.

## SLANTS on Service

"Slants on Service" is a new "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business. These helpful hints and suggestions for improved service methods and shortcuts have been assembled in capsule form.



#### C-Clamp for Thermometer Bulb Useful In Servicing

"Dial thermometers," says Arne Perttola, "are extremely useful in checking the temperature of an evaporator in a refrigerator. And for several years," he adds, "I've used a little 'gizmo' that makes it very easy to attach the bulb of the remote dial thermometer to the evaporator."

First select a short length of copper tube in which the bulb of the thermometer makes a snug fit. Next silver braze the length of tube to a C-clamp as shown in the photo.

The bulb is inserted in the tube and then the tube is forced in good contact with the bulb by using a pair of pliers. Good contact between tube and bulb is necessary for efficient heat transfer so the thermometer will give an accurate reading.

C-clamp, of course, is then used to clamp the bulb in position.

"It might be wise, Perttola suggests, "to use a deeper C-clamp than shown here so the bulb could be put farther back on the evaporator."

Note how the dial thermometer itself is mounted on a board. The thermometer is less likely to be knocked off or otherwise damaged when it's mounted this way.

#### 'Flat' or 'Wild' Beer Due To Various Conditions

"Flat" beer may be due to several causes—temperature too low; pressure is low, permitting CO<sub>2</sub> gas to

escape; leaky kegs; incorrect readings on pressure gauges; foreign material in gas or air line may interrupt pressure flow; glasses unclean.

"Wild" beer may be caused by: too much CO<sub>2</sub> being absorbed by beer; kinks in beer lines; air line doesn't run downward as it should; unclean coils and tap rods; defective beer hoses or lines; temperature too high.

#### JUST ASK US!

Turn to "What's New" Page for useful information on new products.

trade in refrigerators profitably with the original "BLUE BOOK"

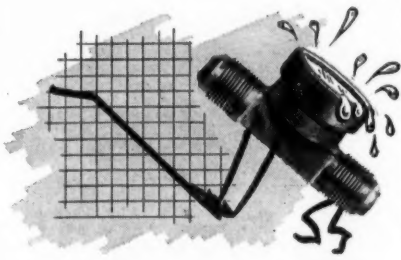
order your copy today

OFF THE PRESS NOW \$5.00 POSTPAID

NATIONAL REFRIGERATOR MARKET REPORT, INC. DEPT. AC-1, P.O. BOX 606 LOS ANGELES 25, CALIF.

## REMCO EXPLAINS THE TRUTH about losses from

### LEAKING LIQUID INDICATORS



Even though they may be constructed of the highest quality materials, conventionally designed liquid indicators depend upon the resiliency (springiness) of the gasket material to form the initial seal and also to maintain the seal.

Unfortunately, rubber-like gasket materials tend to lose their resiliency with age, and as they lose their resiliency, they "cold-flow" or "take a set"—then a leak results.

But not so with E-Z-SEE. In the exclusive E-Z-SEE design, (see illustration) each gasket is backed up by a spring. As the E-Z-SEE gaskets lose some of their resiliency, a leak cannot result because the coil springs compensate by continuing to apply just the right amount of force upon the gaskets, to permanently maintain the seal.

### Get REMCO's E-Z-SEE TO INSURE GREATER PROFITS

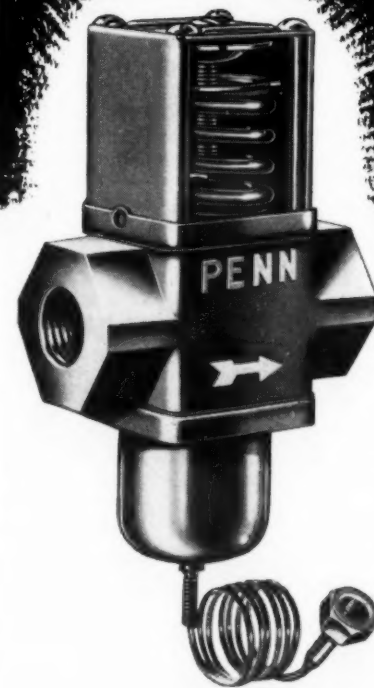
Note how in E-Z-SEE, unlike in conventional liquid indicators, spring-compensated leak-proof gaskets and "floating" high-pressure Pyrex glass assure you the following advantages: 1) Perfectly safe... glass is protected from damage by unique slotting arrangement—safe at pressures up to 500 PSI. 2) Positively leak-proof... can't leak because springs automatically maintain just the right force to form a positive seal around the glass. 3) E-Z-to-see through... both sides of the body are open to let in light through the tubular high-pressure gauge glass. No more losses from leaking—here truly is the 100% answer to the industry's demand for a fool-proof liquid indicator.

Send for Literature and Prices.

REMCO INCORPORATED ZELLENFELD, PENNSYLVANIA

CARRIED IN STOCK BY LEADING WHOLESALERS EVERYWHERE  
West Coast warehouse stock at 2103 So. San Pedro, Los Angeles, Calif.  
EXPORT DEPARTMENT: Melchior, Armstrong, Dessau—Ridgely, N. J.

## LOOK no other water valve has all these features



- No Water Hammer
- Highly Sensitive to Refrigerant Head Pressure
- No Sticking of Seats
- Easy Manual Flushing
- Eliminates Rusting of Range Spring
- No Corrosion or Sedimentation on Sliding Parts

The PENN Series 246 water valve can really "take it" and continue to give top performance. That's why more and more refrigeration men specify PENN... they know it's "tops" on every job. If you haven't tried it... do it now! Ask your wholesaler or write Penn Electric Switch Co., Goshen, Ind. Export Division: 13 E. 40th Street, New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ontario.

PENN AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGE



# Servicing Hermetics In the Field

This is another in the new series of articles written to show the average serviceman how to service hermetic units in the field. Even those who have been working on hermetics for some time will find basic and practical information in these articles that will prove extremely helpful.

## Instruments & Tools Aid In Repairing Hermetics-2

By Arne Perttola, Owner and Manager  
Brighton Hermetic Service, Detroit

The previous article discussed the importance of having the proper tools and instruments for servicing hermetic units and listed the following as desirable:

Combination volt-amp-wattmeter, capacitor selector, ohmmeter, test cord, remote reading dial thermometer, hermetic adapter set, charging hose in short lengths, watch with sweep second hand, pressure gauges.

Use of the volt-amp-wattmeter was described in some detail in last week's article.

The capacitor selector is a very handy device for the hermetic serviceman. As outlined in an earlier installment, a capacitor selector is designed to be hooked up in series with the start winding of a hermetic motor. By means of a dial or a series of toggle switches, various m.f.d. ratings of capacitance can be thrown in the circuit to determine which is best for starting the unit.

By means of a capacitor selector, the correct size replacement capaci-

tor could be determined, for example, if the rating of the original isn't known. Under some circumstances, capacitors can be installed on split-phase units to overcome starting difficulties. This instrument shows the size of the capacitor to install.

The capacitor selector can also be left in the circuit temporarily if a capacitor of the proper size for replacement or installation on a split-phase motor is not immediately available.

Test cord for checking hermetics can be easily made by the serviceman. Parts required are three alligator clips, a pushbutton switch, a 100-120 m.f.d. capacitor, a male plug, and rubber-covered wire. It is hooked up as shown in Fig. 9. Use of the test cord was described in detail in a previous installment of this series.

Another useful instrument is a remote dial thermometer. Besides being useful, this instrument invariably makes a good impression on the serviceman's customer. It permits the serviceman to determine the actual temperature of the evaporator. This is important not only in itself but it also helps in determining whether the low side warms up enough during the off cycle to let the pressures between the high and low sides balance off sufficiently. This is a factor that shouldn't be overlooked in dealing with capillary tube systems.

Good contact must be achieved between the bulb of the thermometer and the evaporator. One way to do this is to freeze the bulb to the evaporator. A quicker and more dependable method is to use a C-clamp arrangement.

A short length of tubing is selected of the right size so the bulb of the remote thermometer fits into the tube snugly. Silver solder the tube to a small C-clamp. Then put the bulb in the tube, crimping it firmly in place with a pair of pliers to make good contact. The bulb then can be quickly fastened in place on the evaporator. Make sure there is good contact with the evaporator so the thermometer dial will give a true reading.

The ohmmeter is a very useful instrument, too. It can be used in checking for grounds as well as for locating the proper terminals for the starting and running windings.

Three different readings can be obtained off the three terminals of a hermetic. The highest amount of resistance will indicate that you are measuring the resistance in the running and starting winding together. The next highest resistance will be that of the starting winding, and the lowest amount of resistance will indicate the running winding.

It might be well to point out that the dial of the ohmmeter is just the reverse of most instruments. Highest resistance is indicated when the pointer is at the extreme left, lowest

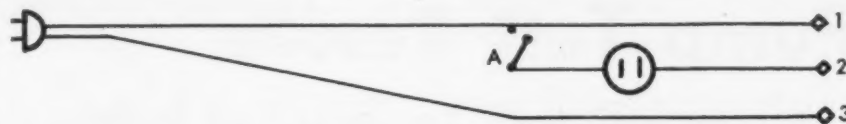


Fig. 9—Cord for testing hermetics can be made with alligator clips (1, 2, and 3), a capacitor of 100-120 m.f.d., a push-button switch (A), a male plug, and wire. Hook it up as shown here.

resistance when the pointer has swung completely around to the right.

Don't check a unit with an ohmmeter while the current is still turned on to the unit. A battery is included with an ohmmeter to supply the power needed for checking the unit. Using the ohmmeter with the line voltage turned on will damage the instrument.

This instrument is also helpful in checking three-wire light and control circuits, particularly if some "junior home mechanic" has tested his ability before calling in the serviceman.

Hermetic adapter sets are necessary to provide gauge ports for checking the pressures of the high and low sides of the system. Necessity for checking pressures on both sides should be obvious to the serviceman.

It would be well to have two adapter sets. For one reason, having two sets permits both the high and low side pressures to be checked at the same time. This arrangement serves another purpose in checking the high side pressure of hermetic units having static condensers.

Obviously, the serviceman will require a pair of gauges—a high pressure gauge and a compound gauge.

To assure accurate readings, the graduations on the scale of the compound gauge should be as fine as possible. Each division on the vacuum side of the scale should represent no more than 1 in. of vacuum.

Charging hose is another necessary item that should be in every tool kit, but charging hoses for hermetic systems should be as short as possible. As mentioned previously, the refrigerant charge of hermetic systems is small, as little as 8 oz., for example, in some models. The charge is also critical, that is, a difference of just an ounce or two below or above the amount specified for the particular system will have a considerable affect on its operation.

A long charging hose may hold too much refrigerant. If even a single ounce escapes during charging, the system may not run properly. Use a short hose, therefore, wherever possible in charging hermetics.

Servicemen working on hermetics should have a watch with a sweep second hand. Such a watch will permit them to time the action of relays. Relays should kick over the starting winding to the running winding within 5 seconds, generally after about 3 seconds, if the system is operating as it should. A watch will eliminate guesswork in this important phase of checking hermetics.

## Trane Announces Field, Staff Appointments

LA CROSSE, Wis.—Managers of two offices, a field representative, and new advertising staff members have been appointed by The Trane Co.

R. S. (Bill) Oyer, formerly with Johnsen Service Co., has been named manager of the New Orleans office. Marvin R. Clemons, formerly associated with Walker Cooke, New Orleans representative for several heating and ventilating manufacturers, has joined the New Orleans office as a field representative.

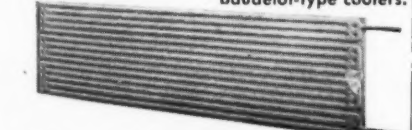
E. M. Jameson, a Trane field representative for the last two years, has been promoted to manager of the Oklahoma City office. He succeeds R. W. Schulte, who died June 2.

Eugene A. Sloane, formerly assistant editor of *Domestic Engineering*, has joined the advertising department. He will supervise three company publications—"Weather Magic" (distributed to architects, engineers, contractors, and industrial plant engineers), "Triangle" (employees), and "Trane News" (sales representatives)—and the Trane technical news service.

Other new members of the Trane advertising department staff include David Cordry, formerly advertising manager of the Foley Mfg. Co., Minneapolis; Richard E. Gagne, graduate of the University of Wisconsin School of Journalism; and Ellen Fowler, graduate of Drake university in Des Moines, Iowa, and formerly staff writer for *The La Crosse Tribune*. Miss Fowler is editing "Trane News."

**buy DEAN**  
"Job Tailored"  
COLD PLATES  
IN  
THE SIZE  
YOU NEED

Zinc metallized steel, or stainless steel in cylinders, U's, angles, tanks, etc. Also plates for boudolot-type coolers.



SEND FOR TECHNICAL DATA BOOK  
**DEAN** PRODUCTS, INC.  
1042 DEAN ST. • BROOKLYN 16, N. Y.

## MR. DISTRIBUTOR DEALER

Farm and home freezers, commercial display cabinets, dairy cases, bottle coolers, walk-in coolers

Profit by selling the  
American "Aristocrat" line

**AMERICAN REFRIGERATION  
CORPORATION**

1025 E. Excelsior Avenue  
Hopkins, Minnesota

**RADIAL  
UNIT COOLERS**  
by  
**KRAMER**

The original Circular Unit.  
A distinctive Kramer  
development that  
has no equal.

Write for Catalog R-125

**KRAMER TRENTON CO. Trenton 5, N. J.**

**Ice-Bank Controls**

Operating on ice-bank thickness, rather than temperature, this control keeps ice-bank ready at all times for peak loads. No overfreezing or blocking of water flow. One of many in the comprehensive line of White-Rodgers refrigeration temperature controls. Send for literature on this unusual control.

**WHITE-RODGERS**  
Controls  
FOR REFRIGERATION  
HEATING AND  
AIR CONDITIONING

ST. LOUIS 8, MO.

Branches:  
NEW YORK 52 Vanderbilt Ave.  
CLEVELAND 5005 Euclid Ave.  
CHICAGO 548 N. Lake Shore Dr.

Resident Sales Engineers in all Principal Cities



# Heat Pump Test Results

Installation for Office Building In Roanoke, Va. Shows Cost To Be Competitive with Other Fuels; Many Advantages In Operation

PORTLAND, Ore.—“The actual energy consumption during the heating cycle indicates that the operating cost of a heat pump system, using air as a heat source, is competitive with other fuels in the Roanoke area.”

This conclusion and others were based on two years' successful operation of the 225-hp. heat pump system that supplies year-round air conditioning to the new six-story office building of the Appalachian Electric Power Co. at Roanoke, Va.

Its performance history was described for the American Society of Heating and Ventilating Engineers at the semi-annual meeting here by Philip Sporn, president, and E. R. Ambrose, air conditioning engineer of American Gas and Electric Service Corp., who designed and engineered the system.

“The heat pump,” they also pointed out, “possesses many unique and desirable features which are adaptable to practically any type and design of year-round air conditioning system. The heat pump can provide instantaneous, automatic, and simultaneous heating and cooling with the same equipment.”

## No Chimney, Soot, or Odors

“A chimney is not required for the unit because no flame of any kind is used and, consequently, there are no products of combustion, soot, dirt, or odors. The system requires only an electric utility service and can be located in the basement, on the roof, in the attic, in a utility room, or almost any other place in a structure.”

“It seems reasonable to expect that the number of heat pump installations will increase materially as engineers, architects, and contractors become more familiar with their many desirable features and with the various possible operating cycles,” believe Sporn and Ambrose.

Size of the Roanoke building served by the heat pump provides 87,600 sq. ft. of floor area and has a calculated heat loss of 1,410,000

B.t.u./hr. at an outdoor design temperature of 15° F. The heat gain during the cooling season is calculated as 2,079,000 B.t.u./hr. at outdoor design temperature of 95° F. dry bulb and 78° F. wet bulb, it was explained.

Actual air conditioning is performed by 153 unit room conditioners (supplemented by a direct ventilation system) located throughout the building and supplied with chilled or warm water from the heat pump equipment in the penthouse atop of the building.

## How Rooms Are Cooled

The room air conditioners include a recirculating fan, filters, and a water coil, and each conditioner is controlled independently by its own thermostat.

Outdoor air coils are located in the penthouse along with the three 75-hp. reciprocating “Freon-12” compressors, each of which has its own heat exchange surface to provide three independent systems. Three fans on the roof of the penthouse supply the outside air heat source to the coils in the penthouse. Additional equipment includes two storage tanks in the basement which are filled with warm or cold water, depending on the season.

Refrigerant and water flow of one of the three systems is shown in Fig. 1. Except for the auditorium coil arrangement in the system shown, the three hookups are identical.

## Operation Described

Operation is described by Sporn and Ambrose as follows:

“During the heating cycle, the path of the refrigerant is from the compressor through the oil separator, four-way valve, condenser-cooler, liquid subcooling coil, liquid receiver, expansion valves, outdoor coils, and then back through the four-way valve to the compressor.”

“The path of the water during this cycle is from the room conditioner units, conditioner coils, booster coils, and/or the storage tanks, through

the two-way valve, condenser-cooler, and the circulating pump back to the several surfaces. The liquid refrigerant subcooling coil preheats the ventilation air.

“During the cooling or defrosting cycle the refrigerant leaving the compressor flows in turn through the oil separator, four-way valve, outdoor coils, liquid receiver, expansion valves, and condenser-cooler, and then back through the four-way valve to the compressor to repeat the cycle. The path of the water during the cooling cycle is the same as that for the heating cycle.”

## Heating a Garage

To heat the 9,150-sq. ft. garage area warm water is circulated from a basement storage tank through ceiling units. Imbedded coils are also provided in the concrete so warm water can be used for snow melting or to prevent icing.

In preparing performance data on the heat pump system, Sporn and Ambrose indicate that the speed of the outdoor air fans had a considerable effect on the system's coefficient of performance.

Fans supplying the outdoor air for the coils initially operated at 565 r.p.m. and the resultant c.o.p. with one compressor running was 3.6.

Later the fan speed was reduced to 395 r.p.m. to increase the c.o.p. “and at the same time to reduce the fan noise transmitted to the adjacent building. Operating the outdoor fans at the lower speed raised the c.o.p. from 16 to 22% and reduced the electric demand by 13 to 15%.”

With one compressor running, the c.o.p. was 4.28 at the slower fan speed compared with 3.6 at the higher speed.

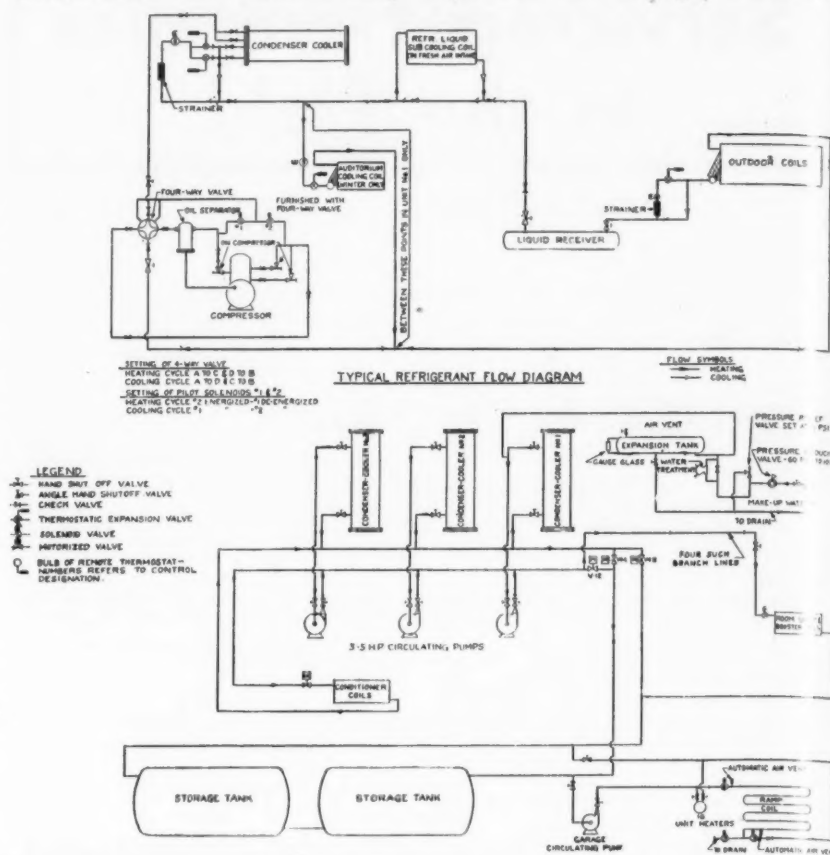
## Effect of Fan Speed

“The effect of the outdoor fan speed on the over-all performance of the system sometimes is not fully realized,” Sporn and Ambrose declared. “... the airflow resulting in the highest coefficient of performance for the compressor and outdoor coil combination is about 27,000 c.f.m. Unfortunately, use of this low airflow seldom results in the most practical installations as far as first cost is concerned. Quite frequently, as was necessary in this installation, some compromises must be made in the design which usually reduce the coefficient of performance below the maximum obtainable.”

With the exception of the four-way valve, all the equipment used on this system and the procedures for its selection are the same as normally employed on conventional air conditioning systems, it was emphasized.

“Since some of the equipment is used for both heating and cooling, the equipment must be checked to

## Elements In Heat Pump System for Large Building



Schematic refrigerant and water flow diagram for a heat pump system as used in an office building in Roanoke, Va. Storage tanks in basement hold water used in the heating or cooling system.

make certain that the design requirements are fulfilled during both cycles. This applies particularly to the conditioner coil which must be sized to have a definite sensible and latent heat capacity during the cooling cycle, and, at the same time provide the required sensible heating during the other cycle.”

Careful selection of equipment is also important to prevent reduction of “the all-important efficiency,” the authors of the study declared. “The auxiliaries are the chief offenders in lowering the coefficient of performance,” as was pointed out with the outdoor air fans, which reduced efficiency by as much as 16 to 22% at the higher speed.

Operating experience since the installation was completed has been satisfactory, it was reported, with an apparent minimum of “bugs.” It (Concluded on next page)

FOR  
**COOL PROFITS**

TIE UP WITH  
**TYPHOON**

PACKAGED AIR CONDITIONERS  
**1½ TO 20 TONS**

EVAPORATIVE CONDENSERS  
**3 TO 20 TONS**

Over 40 Years of  
Air Cooling Experience

**TYPHOON Air Conditioning Co., Inc.**  
794 Union Street, Brooklyn, N. Y.

**3 WAYS BETTER!**

HIGH STABILITY  
LOW WAX  
LOW MOISTURE

**ANSUL OIL 150**

THE ALL-TEMPERATURE REFRIGERATION OIL

**THE FINEST REFRIGERATION OIL ...at any price!**

THE NEW ... IMPROVED ... ANSUL REFRIGERATION OIL ... IS A RESULT OF THE PERSISTENT SEARCH BY ANSUL CHEMISTS AND REFRIGERATION TECHNICIANS FOR THE FINEST QUALITY REFRIGERATION OIL ... AT ANY PRICE!

Since Ansul Refrigeration Oil was introduced in 1949 ... its acceptance by refrigeration men has continued to expand. In only two short years Ansul is one of the leading refrigeration oils sold exclusively through Refrigeration Wholesalers.

The New ... Improved Ansul Refrigeration Oil is now available at leading refrigeration wholesalers everywhere. It meets, or surpasses, every specification established by Ansul Research for a high quality refrigeration oil.

BUY IT NOW AT THE NEW LOW PRICE. Use it for more dependable, trouble-free lubrication.

Ansul has greatly increased its Research facilities — expanded its Research Program — and added new modern pilot plant facilities to better serve the Refrigeration Industry.

## NOTE THESE IMPORTANT ANSUL FEATURES —

- \*Lower floc point.
- \*50% lower wax content.
- \*Moisture — ANSUL CONTROLLED minimum.
- \*Lower pour point.
- \*Rigidly checked for high stability.
- \*Lowest affinity for moisture.
- \*New low price.
- \*Available in quart, 1-gallon and 2-gallon cans; also in 5-gallon and 55-gallon steel containers.

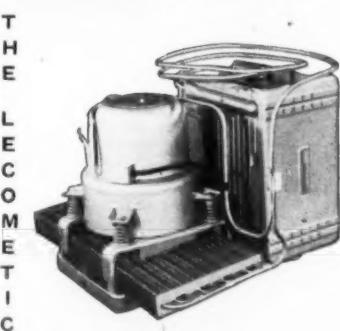
## \*Improved features

**ANSUL**  
CHEMICAL COMPANY  
REFRIGERATION DIVISION  
MARINETTE, WISCONSIN

ANSUL SULFUR DIOXIDE • ANSUL METHYL CHLORIDE • ANSUL OIL • KINETIC “FREON” REFRIGERANTS  
ALSO MANUFACTURERS OF INDUSTRIAL CHEMICALS • DRY CHEMICAL FIRE EXTINGUISHERS

## TAKE ADVANTAGE of DEVALUATION

**LEC** REFRIGERATOR SEALED UNITS ALL VOLTAGES



Now available for the trade at keen prices either with body and starting relay only or complete, ready for immediate installation as depicted above, the “LECOMETIC” suitable for ambient temperatures up to 110° F.

We can offer standard open type condensing units. Also the LEC range of domestic cabinets.

**ARN SALES DEPT.**  
**LONGFORD ENGINEERING CO., LTD.**

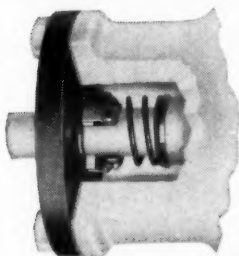
BOGNOR REGIS  
ENGLAND

Telegram:  
Longworks  
Bognor

## ROTARY SEAL

## Replacement Units

- ✓ Simple in Construction
- ✓ Easy to Install
- ✓ Efficient in Operation
- ✓ Economical



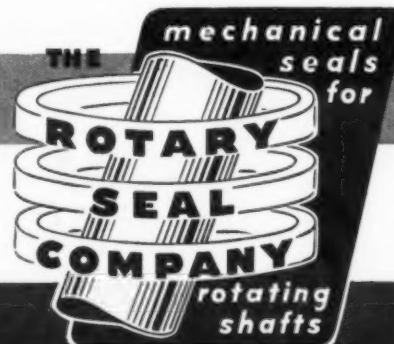
Unit No. 4120

AVAILABLE FOR  
**MORE THAN 900 COMPRESSOR MODELS**

For Commercial, Semi-Commercial, Air Conditioning, and Household Refrigerator Compressors ... over 20 years of performance proof ... Units available for all standard makes.

AT ALL

“Seal with



LEADING JOBBERS

Certainly!”

**2020 NORTH LARRABEE STREET  
CHICAGO 14, ILLINOIS, U.S.A.**  
CANADIAN AGENT: 2025 ADDINGTON AVENUE  
MONTREAL 28, QUEBEC, CANADA



## Heat Pump Test Results--

(Concluded from preceding page)  
was found, however, that on "bright summer days during moderate weather when little heating or cooling is needed, the temperature on the external offices facing west is sometimes several degrees higher than the rest of the building."  
This happened infrequently, but it has been decided to change controls and piping to "zone" the conditioners on this side of the building.

### Kind of Maintenance Needed

Relatively little maintenance has been required on the heat pump equipment itself. Two compressor shaft seals were replaced soon after the system was put in operation, probably because foreign matter had gotten into the system during installation, it was said.

Some trouble was encountered at first with the four-way valves, which were erratic and developed gasket leaks. These difficulties have been corrected, "and it is felt that no further valve trouble will be experienced." That there was some trouble was not unexpected since the valves used on this installation were the first of this large size (4 in.) ever made by the manufacturer, said Sporn and Ambrose.

"It might also be noted that two three-way valves may be substituted for the four-way valve in most of the cycles. This is sometimes done on the smaller installations to reduce the possibility of heat transfer between the high temperature discharge gas and the low temperature suction gas. In the case of the four-way valves used on this installation, this heat transfer was found to be practically negligible."

### Multiple Unit Advantages

Advantages of using three separate 75-hp. systems instead of a single large system were cited as providing "more flexible and dependable operation under variable loads" and "a means of maintaining a minimum electrical demand."

"A majority of the commercial electrical rates are based on the maximum demand which occurs during the billing period. An electrical load having a high demand and a low consumption does not favor a low electrical energy cost. By having a multiple number of units, it is

possible to decrease the demand by operating fewer units for longer periods.

"A further advantage of multiple units with a storage system is that possible benefits from off-peak rates may be realized. Loads may be arranged over a 24-hour period in such a manner, with a storage system, that the total maximum demand for all requirements is greatly reduced."

### Water Sprays Considered

Sporn and Ambrose also called attention to the fact that if water sprays were used on the outdoor coils during the cooling cycle the compressor head pressure could be reduced with a reduction in current consumption. Such sprays, however, were not considered practicable for this installation because the system was designed to permit the addition of three more stories to the building without relocating the equipment or altering its design.

### Hot Water for Tenants

Not to be overlooked in the Appalachian building is the 3-hp. heat pump which supplies hot water. The heat pump is designed to heat 50 gal. of water per hour from 50° to 120°, the water being stored in a 300-gal. insulated tank.

Heat source for this heat pump is exhaust air from the building, which goes over the compressor and through the cooling coil to the exhaust fan, where it is discharged outdoors.

This latter system "provides maximum efficiency by removing heat from the air being discharged from the building and which otherwise would be wasted. This same type of system has a number of possible applications. The heat removed from the exhaust air can be used to heat the service water, or used to heat the ventilation air for the building, as in the case of a hospital where 100% outdoor air was required for ventilation."

### Auto Dealership Is Cooled

SPARTANBURG, S.C.—Offices and showroom of City Motor Car Co., local Dodge-Plymouth dealership, are now air conditioned by two five-ton, self contained Frigidaire units installed by the Calhoun Office Supply Co.

## Design by the Weather

### Weather Bureau Data Seen as Aid In Selecting Type and Size of Heat Pump

PORTLAND, Ore.—Possibilities of designing a heat pump installation on the basis of U. S. Weather Bureau records which may indicate how much heat is available in the ground and air has been suggested by Prof. George S. Smith of the University of Washington.

Results of a two-year study along these lines were outlined by Smith at the semi-annual meeting of the American Society of Heating and Ventilating Engineers here.

It is his thought, essentially, that Weather Bureau data showing air temperatures, heat from radiation of the sun, and rainfall could be interpreted to show approximately how much heat could be obtained from a ground coil. Likewise, the size of the heat pump and operating time requirements might be determined from data generally available.

Not enough information has been collected yet, Smith admits, to permit accurate calculations to be made, but he does believe the method offers possibilities.

### Determining Soil Temperatures

"To determine more accurately the ground heat available, the temperatures near the surface of the soil must be obtained throughout the year, and even these would give information for that year only," he cautions. "Needless to say, the time and cost would in general be prohibitive."

"If similar comparisons could be made between the approximate methods and the more accurate ones wherever actual ground surface temperatures are available, the accumulated results would probably suggest a very acceptable procedure until enough experience with heat pump and ground-grid operation has been acquired to suggest better methods."

For this study, which is part of an extensive program supported by Bonneville Power Administration and the University of Washington, three temperature stations have been employed.

At the main station temperatures are recorded by means of thermocouples at various distances from 150 ft. above to 50 ft. below the surface of the ground. Two other stations record temperatures of the ground at 1, 2, 3, 4, 6, and 10 ft. below the surface.

### Better Methods Needed

"The average temperature at the start of the heating season can be found for any depth at which the grid might be placed, assuming that the soil has regained normal temperature conditions during the summer," Smith says. "If the soil has not attained normal temperature conditions, the ground grid may not be adequate or it may be of such design that a new lower average soil temperature has been established."

"In colder climates there is an advantage to be gained by placing the tubes rather deep to gain the advantage of the temperature lag with respect to the atmosphere above the surface. In rather warm climates, and especially where there is considerable sunshine during the heating season, a grid only a foot or two below the surface will gain the advantage of the sun's radiated heat and yet avoid the disadvantage of short cold spells."

"The amount of heat available for a ground grid is probably limited to the heat absorbed by the soil from the sun's radiation, plus that precipitated from the atmosphere and carried in by the rain. The solar heat thus supplied to the earth, per square foot of surface, may be closely approximated by calculation," declares Smith.

### Correlating Air, Soil Temperatures

"The soil surface temperatures are not normally available and determining them would require time and expense. There should, however, be some fairly definite relation between the maximum daily air temperature and the average daily surface soil temperature for that particular day," Smith contends.

"This substitution will of course give only an approximation of the true value, but will in general give results accurate enough for heat

pump design purposes. Such information is readily available at any Weather Bureau station."

Importance of rainfall in adding heat to the ground should not be overlooked, especially in areas such as the Pacific Northwest, pointed out Smith.

"In many localities the rainfall probably carries a considerable amount of heat into the soil, and the ground moisture due to rain will greatly increase the soil's capacity to maintain this heat energy in storage. Any accurate method for determining the amount of heat energy derived from this source would require a great deal of time and study."

### Effect of Rainfall

"The amount of heat added by rainfall can be readily computed by using as data the weight of rainwater falling on each square foot, and the difference between the average air temperatures and the assumed average or base ground temperature. This method assumes that the temperature of the rainwater is at the average air temperature."

"Such an assumption is probably quite in error during the winter months because a rainy spell will raise the air temperature considerably above the average for the month while a cold dry spell will generally lower it."

"Fortunately," the University of Washington professor says, "such an error will result in more heat addition than the calculations indicate."

"The total calculated heat added per year per square-foot area of soil for any assumed average ground temperature will then be the sum due to the sun's radiation plus that added by the rainfall. As crude as this method of calculating the yearly heat available in the soil for heat pump use may appear, it does offer some guidance until experience may prove the method too pessimistic."

### No Point in Digging Deep

Smith dismisses the possibility of obtaining heat from the earth's interior "since the earth's natural temperature gradient is about 1° increase for every 60-ft. increase in depth below the point at which the temperature remains virtually constant throughout the year. Such a small differential temperature will cause very little heat migration."

Another source of ground heat, he indicated, is underground moisture migration, which may supply "a given length of buried tubing with far more heat than would otherwise be available" especially if the surface has a more or less gradual slope.

If there are other heat pumps in the vicinity, however, "such moisture migration might become a detriment," he warns.

## IT PAYS TO KNOW! REFRIGERATION AIR CONDITIONING INFORMATION IN A HANDY FORM

Every Serviceman, Mechanic & Operator can use AUDELS REFRIGERATION & AIR CONDITIONING GUIDE, containing Practical, Inside Trade information on the whole subject of Refrigeration & Air Conditioning. Tells How to Service, Operate & Repair Modern Household, Commercial & Industrial Units & Air Conditioning Systems. 1242 Pages, 46 Chapters Fully Illustrated and Indexed for Quick Reference.

**1001 FACTS**  
This big, highly indorsed book, easy to understand, gives Basic Principles on How to Repair & Install Compressors & CONTROL DEVICES  
How to locate Electric Motor Troubles, How to Service & Adjust Cold Storage Lockers, Quick Freezing Units, Dairy & Market Refrigerators, Ice Cream & Soda Fountains, How to Maintain Water Coolers, Marine Refrigeration, Plant Auxiliaries, Ice Making, Ammonia Plants, Brine Systems, Servicing Air Conditioning Systems, Replacement of Refrigerants including Freons, Heat Transmission & Pressure Temperature Charts, Tables, Duct Systems, Safety Code, etc.

**ANSWERS YOUR QUESTIONS**  
Get this Handy Information for Yourself. Mail Coupon Today.

**\$4 COMPLETE. PAY ONLY \$1 A MO.**  
AUDEL, Publishers, 49 W. 23 St., N. Y. 10  
MAIL AUDELS NEW REFRIGERATION GUIDE for free examination. If O. K. I will send you \$1 in 7 days then remit \$1 monthly until price of \$4 is paid. Otherwise I will return it.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Occupation \_\_\_\_\_  
Employed by \_\_\_\_\_ R-12



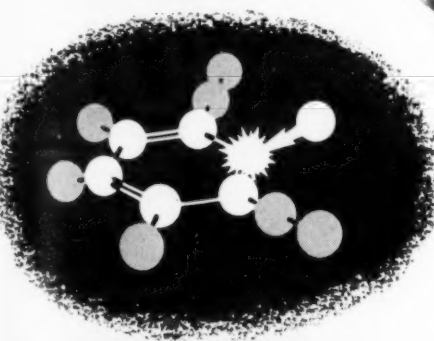

**MADE TO A NEW  
CHEMICAL FORMULA  
ESPECIALLY FOR  
LOW TEMPERATURE  
BRAZING**

WRITE FOR THIS  
12 PAGE BULLETIN  
"RESEARCH  
STUDIES OF BRAZING FLUXES"

**UNITED WIRE & SUPPLY CORP.**  
PROVIDENCE 7, RHODE ISLAND

**JUST ASK US!**  
Turn to "What's New" Page for useful information on new products.

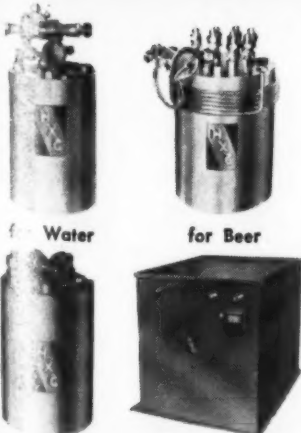
## THESE WON'T SPLIT



## heat-x

## CAST ALUMINUM LIQUID COOLERS

No more split tubes due to freezing. Heat-X engineers were determined to design a non-split cooler . . . a cooler that *couldn't* split. Casting liquid and refrigerant coils in a compact aluminum block was the answer. The result . . . a better cooler, lower in cost, easier to install and service with *more profit* for you. Investigate the Heat-X line today.



WRITE DEPT. AC  
FOR SPECIFICATION SHEETS

**THE HEAT-X-CHANGER CO., INC.**  
BREWSTER, NEW YORK

## PARAGON DEFROSTING TIME SWITCHES

300-M SERIES

From \$19<sup>50</sup> List

**FOR COMMERCIAL DEFROSTING — Electric Heat • Hot Gas • Compressor Shut-Down**

**THE FINEST TIME SWITCH YOU CAN USE**

FOR  
UNIT COOLERS • WALK-IN BOXES  
FROZEN-FOOD DISPLAY CABINETS  
LOCKER PLANTS • REACH-IN CABINETS  
• FUR-STORAGE VAULTS

Paragon 300-M series offers you the finest in accurate, durable, precision-built time switches for all types of commercial defrosting applications where defrost period is two hours or less. Easy-to-set pin-type dial for up to 8 periods per day. Heavy hinged case; unbreakable door glass. Also made in heavy-duty outdoor type, Series 330.

See your jobber or write to:

**Paragon ELECTRIC COMPANY**  
1687 TWELFTH STREET • TWO RIVERS, WISCONSIN

**AMERICA'S LARGEST EXCLUSIVE MANUFACTURER OF TIME CONTROLS FOR ALL USES**



## Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

### Question & Answer On Drying Hermetic Units

Repairing hermetic units in the field is a subject that is growing in interest, especially among independent service organizations who do not always have connections with factory organizations that enable them to get replacement units.

Regardless of whether or not the relatively small shop should attempt to do this type of repair, the fact remains, that many shops are opening hermetic motor-compressors and repairing them. Some of these repairs are probably not up to factory standards; some may not be to the best interests of the user.

On the other hand, a great many hermetic units over the past ten years have been successfully repaired in small shops, with much less equipment than the original manufacturer of the unit would consider necessary. This is being done more and more and will doubtless continue, especially if material shortages or any other factors make it difficult for the service engineer to get factory replacement units.

Quite a number of readers have written us on this subject, and the following is a composite of several typical letters received.

#### QUESTION:

In our town we have trouble in getting factory replacement units at dealer prices for several makes of refrigerators. We cannot afford to pay full retail prices for exchange units, for we cannot make enough

out of just the labor for exchanging the unit. By the time we make the original service call and find that a new unit is necessary, get one from the dealer of that make at full retail price with no discount to us, exchange the unit, and take the old one back to the dealer, we cannot make enough from a \$15 exchange charge, which is what he charges for that service, to pay us for the time it takes.

If, as with some makes, we get the replacement unit at dealer's price, we can make a fair profit on a unit exchange, but it is a rather expensive thing for the customer—all the way from around \$65 to \$90 and even more for some units. Lots of times they tell us to open the unit and fix it if we can, and that they can't afford to or won't pay the cost of replacing the unit with a factory unit, and that they will buy a new refrigerator instead.

We have a fairly good shop with a bake oven, a small lathe, a pretty good vacuum pump that we made from an old Grunow unit that will pump a 29-in. vacuum, and plenty of good hand tools. We have been in the service business 9 years and have a good reputation.

We cannot get repair parts, so we have to make what few we need. It's surprising how few parts we have to replace though—that is, compressor parts. Most of the trouble is from stopped capillaries, leaks, burned-out motors, and stuck compressors—and many of the latter can be freed without replacing many parts.

We haven't rebuilt many units, but so far we have had pretty good luck. However, we don't believe we are getting them dry enough, even though we bake them in the oven for several hours. During that time, we have the vacuum pump running on them, pulling a 29-in. vacuum.

Also, we put on a good big silica gel drier.

We have had a couple show frozen capillary tubes a week or so after they were repaired. On those two, we replaced the drier and so far, they haven't given us any more trouble. We can't understand where that water came from. What do you suggest?

#### ANSWER:

Just baking in the oven, with a 29-in. vacuum, isn't usually enough to dry a hermetic unit. But before going into that, here are some other points.

#### MOISTURE IN OIL

Just how dry is the oil that you are using? If you are taking it from a large container, moist air must be let into the container when you take out some oil, unless the air to the container is let in through a drier, and the container kept tightly sealed.

It is surprising how much moisture oil can absorb from room air. Many servicemen are now buying their refrigeration oil in quart cans, and discarding the remaining oil or using it to oil motors, etc. It is suggested that you check your methods of handling oil.

(For a discussion on how to protect oil in drums or other large containers from contamination by moisture and also dust and foreign matter, see Chapter 32 of Volume J-2 of Refrigeration Problems, reproducing the article originally appearing in this column in the Aug. 16, 1943 issue of AIR CONDITIONING & REFRIGERATION NEWS.)

#### MOISTURE FROM REFRIGERANT CYLINDERS

You could be introducing moisture with the "Freon-12." When you get "Freon-12" in factory-filled cylinders, it has a moisture content of less than 10 parts per million corresponding to a dewpoint of about 6° F. It is doubtful, therefore, that you would get enough moisture to bother a household refrigerator whose evaporator is not apt to be colder than the dewpoint of "Freon-12" as it comes from the factory. Quite often though, small service cylinders have quite a bit of moisture in them, and this may be a possible source of your moisture, if you are using ordinary service cylinders, that you use out on service.

(To Be Continued)

### Westinghouse Engineer Gets \$5,000 Award for 'Frost-Free' Invention

SPRINGFIELD, Mass.—Graham S. McCloy, 44-year-old engineer in the Westinghouse Electric Corp.'s appliance division plant here, was recently awarded \$5,000 for inventing the "Frost-Free" refrigerator.

The \$5,000 check was handed to him by Gwilym A. Price, Westinghouse president, at a special ceremony attended by other top company officials and some 300 of McCloy's fellow employees.

The award is part of a Westinghouse program designed to reward outstanding company inventors.

Although the Frost-Free refrigerator was developed by McCloy in 1941 when he was a design engineer, World War II prevented its immediate manufacture.

Through McCloy's work, two patents have been granted on this refrigerator. One covers the fully-automatic refrigerator where defrosting is accomplished in response to a predetermined number of door openings.

The second patent covers the refrigerating circuits in the Frost-Free line.

The award was a complete surprise to McCloy, who now is section manager of technical development in the engineering department here.

Asked what he intended to do with the \$5,000—which will be somewhat less after income taxes—he replied: "Gosh—I haven't had time to get used to it yet; I just don't know."

### Biggest Shipment from Portland Airport



### 4 Bakeraire Units Fly To Keesler Air Base

SOUTH WINDHAM, Me.—Four 10-ton Bakeraire air conditioning units destined for the new Keesler Air Base instrument school at Biloxi, Miss., recently made up the largest single shipment ever to leave the Portland airport, C. M. Hatcher, advertising and sales promotion manager of Baker Refrigeration Corp. has announced.

The units were picked up by an air force C-54 cargo plane that was routed to Portland from an Oklahoma base during a routine flight. The four packaged units each weighed 2,650 lbs. and made a total payload of more than five tons.

Army officials said that the instrument school was scheduled to start in early July and controlled temperatures were essential for accurate instrument readings.

The air force furnished a DO-22 rating to enable prompt manufacture of the units and to expedite the procurement of necessary scarce materials.

The shipment, consigned to the Gulf Air Co., Baker distributor in Mobile, Ala., made the trip to Biloxi non-stop in slightly more than seven hours.

### Museum Orders Carload Of Trion Air Filters

McKEES ROCKS, Pa.—An order has been received by Trion, Inc. here for a carload of electric air filters for the Metropolitan Museum of Art in New York City.

Designed to clean an air volume of 260,000 c.f.m., the order is the equivalent of what would be required to filter the air in over 200 homes.

The company added that most of its production today is going into electric filters for various high priority industrial enterprises. Recent installations have been made in plants manufacturing proximity fuses, radar equipment, etc.

**nolin** VEGETABLE CASE  
meets your customer's demand  
Perfect for small stores or markets  
beautifully finished  
Immediate Delivery  
NOLIN MANUFACTURING COMPANY  
Division of  
NOLIN BROS. REFRIGERATION CO., INC.  
1100 MADISON AVENUE, P. O. BOX 1389, MONTGOMERY, ALABAMA PHONE 5-4400

**WE WILL BUY!**  
SURPLUS REFRIGERATION UNITS  
BELT-DRIVEN OR HERMETICS  
1/6 H.P. to 10 H.P.  
ANY QUANTITIES • MUST BE NEW  
Write, Phone Or Call For  
IMMEDIATE ACTION  
**TRACO Industrial Corp.**  
455 W. 19 St., N. Y. 19, WATKINS 4-4302  
(Send for Traco's complete list of sensational bargains)

**Genuine Joe says:**  
"Always buy Genuine WAGNER Brushes"  
Replace brushes in Wagner Motors with genuine Wagner brushes because Wagner correct grade brushes give maximum performance, commutator and brush life. Identify them by the name WAGNER on the brushes.  
Wagner Electric Corporation  
6471 PLYMOUTH AVENUE, SAINT LOUIS 14, MO., U. S. A.

**YOU CAN'T GET ALONG WITHOUT THIS NEW PARTS CATALOG**  
**HARRY ALTER'S**  
SPRING-AND-SUMMER 1951  
**DEPENDABOOK** No. 154  
Over 9,000 Refrigeration Parts and Supplies  
To successfully conduct a business in these days of scarcities, you really need DEPENDABOOK No. 154... If it's available you'll find it listed in this latest edition.  
"Service doesn't falter when it comes from Harry Alter"  
**The HARRY ALTER CO.** WHOLESALE ONLY  
1728 South Michigan Avenue Chicago 16, Ill. 134 Lafayette Street New York 13, N.Y.

### Refrigeration Units WANTED

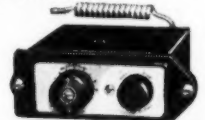
Desire to purchase 1/8 to 1-HP Sealed or Open type standard brands; Complete condensing units; Also motors controls, valves, etc. Give full details.

**HARWOODE EXPORT CO.**  
31 E. 4 Street, New York 3, N. Y.

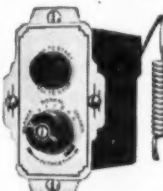
### IT COVERS ALL MY NEEDS

In the Cutler-Hammer Line you will find "specific-fit" replacement units for more than 1000 refrigerator models

Just a few of the "specific-fit" controls in the unequalled Cutler-Hammer line.



9502N383 C-H "specific-fit" for Copeland 1937-1938 models.



9502N372 C-H "specific-fit" for Kelvinator 1932 models.



9502N95 C-H "specific-fit" for Tagliabue models.



9521N29 C-H "specific-fit" for Frigidaire 1936-37-38 models.



9525N106 C-H "specific-fit" for Coldspot 1949-1950 models.

No "modifying," no fussing, no delay when you answer service calls with C-H "specific-fit" replacement control units. You take out the old, put in the new... and you are through! It's the easy, sure way to do the job right because Cutler-Hammer has manufactured such "specific-fit" units for more than 1,000 models of refrigerators built since 1925. And you'll also quickly see how the widely-known Cutler-Hammer name (advertised in The Saturday Evening Post, Time, Newsweek, American Home, Better Homes & Gardens, House & Garden, etc.) builds customer confidence and good will. The C-H refrigeration control catalog, as well as the items you need, are available through your authorized C-H refrigeration wholesaler. Do not forget, this C-H refrigeration control line includes the popular general purpose two-button replacement unit (Type 9502) which incorporates dependable motor overload protection. CUTLER-HAMMER, Inc., 1362 St. Paul Avenue, Milwaukee 1, Wisconsin.



Featured by Cutler-Hammer refrigeration wholesalers and recommended by alert service dealers from coast to coast.



## May NEMA Freezer Sales Hit 56,623 Units; 334,600 Units Sold In First 5 Months

Summary for May and First Five Months, 1951

Electric Farm and Home Freezers—Complete—Sales By Sizes—Units

MAY (24 Companies)				
Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. 4.9 cu. ft. and under...	5	...	...	5
2. 5.0 to 6.9 cu. ft. ....	1,617	...	36	1,653
3. 7.0 to 8.9 cu. ft. ....	7,411	301	97	7,809
4. 9.0 to 10.9 cu. ft. ....	1,590	...	229	1,819
5. 11.0 to 12.9 cu. ft. ....	16,217	352	378	16,947
6. 13.0 to 16.9 cu. ft. ....	18,006	232	26	18,264
7. 17.0 to 20.9 cu. ft. ....	9,305	20	46	9,371
8. 21.0 to 29.9 cu. ft. ....	463	...	...	463
9. 30.0 to 39.9 cu. ft. ....	282	...	...	282
10. 40.0 to 49.9 cu. ft. ....	...	...	...	...
11. 50.0 to 59.9 cu. ft. ....	...	...	...	...
12. 60.0 cu. ft. and over...	10	...	...	10
<b>Total—All Models</b> .....	<b>54,906</b>	<b>905</b>	<b>812</b>	<b>56,623</b>
<b>13. Total Upright Models</b> (included in above) ..	<b>1,215</b>	...	...	<b>1,215</b>

## FIRST FIVE MONTHS (24-25 Companies)

Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. 4.9 cu. ft. and under...	44	...	...	44
2. 5.0 to 6.9 cu. ft. ....	9,486	...	281	9,767
3. 7.0 to 8.9 cu. ft. ....	48,191	858	1,223	50,272
4. 9.0 to 10.9 cu. ft. ....	29,710	1	767	30,478
5. 11.0 to 12.9 cu. ft. ....	104,051	1,023	1,829	106,903
6. 13.0 to 16.9 cu. ft. ....	85,321	472	258	86,051
7. 17.0 to 20.9 cu. ft. ....	44,842	99	164	45,105
8. 21.0 to 29.9 cu. ft. ....	4,688	...	5	4,693
9. 30.0 to 39.9 cu. ft. ....	1,242	...	...	1,242
10. 40.0 to 49.9 cu. ft. ....	3	...	...	3
11. 50.0 to 59.9 cu. ft. ....	...	...	...	...
12. 60.0 cu. ft. and over...	42	...	...	42
<b>Total—All Models</b> .....	<b>327,620</b>	<b>2,453</b>	<b>4,527</b>	<b>334,600</b>
<b>13. Total Upright Models</b> (included in above) ..	<b>9,160</b>	...	<b>1</b>	<b>9,161</b>

Participating companies: Avco Mfg. Corp.; Ben-Hur Mfg. Co.; Carrier Corp.; The Coolerator Co.; Deepfreeze Appliance Div., Motor Products Corp.; Frigidaire Div., General Motors Corp.; General Electric Co.; Gibson Refrigerator Co.; Hotpoint, Inc.; International Harvester Co.; Kelvinator Div., Nash-Kelvinator Corp.; A. J. Lindemann & Hoverson Co.; Masterfreez Home Locker Mfg. Co.; The Maytag Co.; Norge Div., Borg-Warner Corp.; Refrigeration Div., Philco Corp.; Revco, Inc.; Sanitary Refrigerator Co.; Schaefer, Inc.; Emil Steinhilber & Son, Inc.; Seeger Refrigerator Co.; Victor Products Corp.; Westinghouse Electric Corp.; Wilson Refrigeration, Inc.; August G. Barkow Mfg. Co.

## Freezer Sales--

(Concluded from Page 1, Column 3) the year totaled 334,600 units, 65% higher than for the same period last year.

Best selling sizes continued to be in the range from 13 to 16.9 cu. ft. capacity, closely followed by those in the 11 to 12.9 cu. ft. category. These two categories accounted for more than 35,000 of the 56,000 units sold in May.

Of the month's total, 1,215 units were of the upright variety. Sold outside of the United States were 1,717 units.

Of the five months' total, 106,903 units were in the 11 to 12.9 cu. ft. classification, and 86,051 units in the 13 to 16.9 cu. ft. group.

Philadelphia Distributor  
Named for Spacarb Machine

STAMFORD, Conn.—The Cup Machine Service Co. of 1841 North 21st St., Philadelphia, has just been appointed distributor for the Spacarb 4-Flavor Hot 'n' Cold Mix-A-Drink machine, according to H. J. "Pete" Foster, vice president and sales manager of Spacarb, Inc., here.

The new distributorship will cover the areas of southern New Jersey, Delaware, and southeastern Pennsylvania. Charles Ashley is vice president of the company and Thomas Thompson has charge of sales.

In addition to acting as distributor for Spacarb cup equipment, Cup Machine Service will also represent the Bert Mills Coffee Bar and Soup Bar for Spacarb, who is national representative for Bert Mills Co.

## Emerson Offers TV Buyers Money Back on Color Sets for 2 Yrs.

NEW YORK CITY—Emerson Radio & Phonograph Corp. is guaranteeing for two years that the full amount consumers pay now for any one of its 1952 black-and-white television receivers can be applied as whole or partial payment on any make, style, or model color TV set purchased before Aug. 31, 1953, from the seller of the 1952 set.

The sales promotion plan was regarded as a \$20,000,000 gamble that non-compatible color television will not become popular in the next two years. Main aim of the offer is to stimulate buying of black-and-white sets by consumers who have hesitated to buy because color TV is "just around the corner."

The plan was announced to the public here in a large newspaper advertisement run by John Wanamaker, the only store offering the plan in New York City.

"This plan," the advertisement said, "was devised for the many families who desire to buy a television set now, but feel that such a purchase would not prove a wise investment if color television were available in a few months."

"The Wanamaker-Emerson Plan provides a means for such families to enjoy black and white television now knowing that the price they paid for their television sets is a whole or partial payment on any color television set they select at Wanamaker's during the next two years."

It was pointed out that the plan "will be in effect for a limited time or until the sets we have allotted to be sold under this plan are all sold—then the offer will be withdrawn."

Operation of the plan was explained as follows:

The buyer of every set sold under the plan will receive a guarantee at the time of purchase. At the same time, the dealer will register the serial number of the set, the purchase price, and the purchaser's name.

If the purchaser decides to buy a color set during the guarantee period, he may select any make, style, or model receiver offered by the dealer. To get full credit, he must return the 1952 Emerson set and it must be in operating condition.

Credit will be handled this way. If, for example, the purchaser selects a color set costing \$349.95 and the Emerson set he bought earlier had cost \$459.95, he will receive \$459.95 credit—\$349.95 to be applied toward the color set and \$110 in credit to be spent for anything desired at the dealer's store.

Under present government regulations, Emerson can produce about 125,000 TV sets in the second half of this year, according to Benjamin Abrams, president. Since no time limit has been set on the promotion as yet, the entire production could be subject to returns during the next two years.

Should a compatible system be worked out for broadcast standards in the meantime, he thinks it would take more than two years to get it approved by the Federal Communications Commission.

## FCC Asks Written Arguments on Channel Allocation

WASHINGTON, D. C.—The Federal Communications Commission this month will begin accepting written arguments on its proposal for allocating new television channels.

This will be the first step in a recently-adopted procedure aimed at clearing up the city-by-city allocation of new channels by late this year or early next year.

The procedure will be started on Aug. 27 by Allen B. Du Mont Laboratories. On that date, the company will submit written evidence of its views regarding the FCC's allocation plan. Du Mont has an allocation plan of its own, which is different than that of the agency.

Between Aug. 27 and Oct. 22, other interested parties will submit their evidence on dates set by the FCC. From Sept. 17 to Nov. 12, the agency will accept rebuttal testimony. From Oct. 1 to Nov. 26, the commission will receive final remarks. Then the agency will take the matter under consideration.

## NPA Announces Series of Price Act Prosecutions

WASHINGTON, D. C.—The first of a nationwide series of prosecutions of alleged willful violations of its orders was started recently in New York City by the National Production Authority.

At the same time, Manly Fleischman, NPA administrator, announced the formation of a "compliance court" to hear and act upon charges of violation of the agency's orders.

Meanwhile, the Office of Price Stabilization took legal action against reported violators of its lumber price control regulations in Virginia, North Carolina, and Georgia.

The action instituted in New York City by the NPA is against Ender Mfg. Corp., producer of fluorescent lighting equipment, and its president, Jules Levenstein. This is the first criminal prosecution started by the agency.

Levenstein and his company are charged with obtaining 458,910 lbs. of cold rolled steel sheets on a DO-40 priority rating to fill defense orders that required 333,916 lbs. They are further charged with having sold 65,000 lbs. of the 124,994 lbs. of steel procured on the over-extension of the priority rating, at a price averaging 16 cents a pound. At the time, the market value of the steel was reported as 7 cents a pound.

If convicted, Levenstein faces a fine of not more than \$10,000 and imprisonment for not more than one year on each of 12 counts.

Walter H. Foster, Boston attorney, has been appointed chief hearing commissioner of the NPA's new "compliance court." He will head a group of noted jurists who will serve the court as commissioners.

Cases involving alleged criminal violation of priority and allocation orders may be referred to the Justice Department for action. Other cases will go to the commissioners in the cities where the reported violations occur.

Three companies have been charged by the OPS with violating its lumber price control regulations. Four others are to be prosecuted soon, it was said.

In Raleigh, N. C., a federal court consent judgment was issued ordering Halsey Hardwood Co. to maintain

all records required under Section 16 of the General Ceiling Price Regulation at its place of business in Edenton. This was the first court test of the question of where records must be kept under provisions of OPS regulations.

## 20 Hotpoint Distributors Enroll 90% of Salesmen In Salesmaster's Club

CHICAGO—In a continuing program to stimulate aggressive retail selling, Hotpoint Inc., announced that 20 distributor sales promotion managers have qualified for merchandise prizes by enrolling 90% of their retail salesmen in Hotpoint's Salesmaster's Club.

The club is an honorary organization with a membership of 8,500 retailers set up in April, 1950, in recognition of aggressive selling practices.

This year's program will again feature a nationwide competition to select the top Hotpoint salesmen throughout the nation, who automatically become members of the National Sales Council.

The 20 distributor sales promotion managers who qualified for merchandise prizes include:

G. R. Rahmes, Paul Jeffrey Co., Syracuse; A. McMaster, General Electric Supply Corp., Newark; W. T. McGlathery, Graybar Electric Co., Birmingham; J. H. Chapman, Jr., Graybar, Columbia, S. C.; R. S. Laber, Graybar, Youngstown.

P. V. Thompson, W. A. Case & Sons Mfg. Co., Erie; G. Bailey, Wheeling Kitchen Equipment Co., Wheeling, W. Va.; D. Jones, L & K Electric Co., Binghamton; G. F. Peterson, Graybar, Minneapolis; M. Paulsen, Graybar, Kansas City; J. L. Ringwalt, Graybar, Tulsa; U. Skipper, Graybar, Houston.

L. M. Stratton III, Stratton-Warren Hardware Co., Memphis; B. M. Arnett, Gorman Engineering Co., El Paso; J. R. Duffy, Graybar, Louisville; J. Wilkin, Graybar, Evansville, Ind.; J. Phillips, Terry-Durbin Co., Cedar Rapids; L. W. Clifford, Hawaiian Electric Co., Ltd., Honolulu; L. V. Chase, Graybar, Seattle; and C. King, Graybar, Des Moines.

## COPY CALL!

## Silver Anniversary Issue

September 17



Twenty-five years ago Bobby Jones won the British and U. S. Open Championships, the U. S. Govt. budget was \$3,741,787,060, pork chops sold in the stores for 39 cents a pound . . . and ACRN was founded as "The Newspaper of the Industry."

Now the NEWS approaches its 25th birthday . . . and looks back over a quarter century during which time refrigeration and air conditioning has grown up to be one of the nation's leading industries.

The NEWS in its Silver Anniversary Issue will trace the history of the magnificent development of the industry during this period. It will be an outstanding issue of lasting interest.

Advertisers have a grand opportunity to tell their own stories . . . in their own way . . . of the achievements and the growth and progress of their own companies in the expansion of the industry.

ADVERTISING CLOSES SEPTEMBER 7

## Air Conditioning & Refrigeration News

The Newspaper of the Industry

# McCORD

## CONDENSERS

NO JOINTS  
MAXIMUM HEAT TRANSFER  
COPPER BRAZED  
FULL SIZE BENDS • NO JOINTS  
COMPLETE RANGE OF SIZES  
VARIOUS FIN WIDTHS

**UNDERWRITER  
APPROVED**

UNDERWRITERS APPROVAL INSURES A  
SATISFACTORY PRODUCT IN SERVICE.  
Write for Engineering Information

# McCORD

## CORPORATION

DETROIT

## KEEP IN TOUCH WITH

This official organ of the British Refrigerating Industry incorporates the two original British Journals: "Cold Storage & Produce Review" and "Ice & Cold Storage." Now in its 54th year, "Modern Refrigeration" gives the latest reliable technical and practical information.

SUBSCRIPTION, POST FREE

\$4.00 A YEAR

Send for a free specimen copy.

MODERN REFRIGERATION, Empire House, St. Martin's-le-Grand,  
London, E.C.1, England

## MODERN REFRIGERATION



Every One in the Industry

Should READ . . .

# ONE FOOT IN THE DOOR

**THE LAUGH - LEARN - PROFIT BOOK**  
by **GEORGE F. TAUBENECK**

... Because Every Laugh Drives Home a  
SOUND SALES PRINCIPLE!

"This is a funny book," declares George Taubeneck, editor of *Air Conditioning & Refrigeration News*, in his heading for Chapter 1. That's true. You'll laugh! You'll learn, too.

"One Foot in the Door" is the laugh-and-fact-packed story of Specialty Selling. It takes you back through chuckling pages to the birth of the specialty merchandising art under John H. Patterson of N.C.R. fame, and it takes you forward—again with smiles and guffaws—to the shining future.

It clearly delineates the selling principles which years of experience

have set up—and makes them easy to remember by associating these principles with humorous anecdotes. It vigorously points up the job ahead for sales management—tells what, where, why, when, and how.

It pleads eloquently for—and points the way toward—the more efficient distribution system that will be one of the strongest bulwarks of private enterprise.

It does all this so agreeably and fascinatingly that, when you finally finish it, you'll call it the most enjoyable book you've read in a decade.



## CHAPTER TITLES from "ONE FOOT IN THE DOOR"

1. "This Is a Funny Book"
2. The Old Master—and How He Got That Way
3. Making Direct-Mail Advertising Respectable
4. Hair Grows on a Billiard Ball
5. Publicity Isn't Always Free
6. People See Better Than They Hear
7. How to Humanize Your Company
8. Tom Thumb Cartels
9. Finding the Rainbow's Pot-of-Gold
10. There's Always One Best Way to Tell Your Story
11. You Can't Get Off First Base Without a Sales Manual
12. "It Pays for Itself"
13. Ask the Man Who Uses One
14. Everybody Loves a Convention
15. Sales Training Schools Must Be Clever and Entertaining
16. Circuit Riding Becomes a Profession
17. Make It Clear, Make It Simple, Make It Direct
18. Just a Minute, Dear
19. Five Will Get You Ten
20. Mama Can Help, Too
21. Ask the Man Who Does the Work
22. Factory Open House Policy
23. Who Says You Can't Sell Abroad?
24. "Tell All" Promotion Rings the Bell

PUBLISHED BY  
**CONJURE HOUSE**  
BOOK DIVISION OF  
BUSINESS NEWS PUBLISHING CO.

450 WEST FORT STREET  
DETROIT 26, MICHIGAN



USE THIS COUPON → **\$3.00** ← USE THIS COUPON  
ONLY POSTPAID\*

CONJURE HOUSE  
Div. of Business News Publishing Co.  
450 WEST FORT STREET  
DETROIT 26, MICHIGAN

PLEASE SHIP US ..... COPIES OF "ONE FOOT IN THE DOOR" AT \$3.00 PER COPY.

☐ CHECK ENCLOSED ☐ BILL US

Company .....

Address .....

By .....

\*Postpaid only when remittance accompanies order.



## OFF THE CHEST

### BILLIONS FOR FOREIGNERS, WHAT FOR FLOOD AREAS?

Refrigeration Equipment Co.  
Kansas City, Mo.

Editor:

Thought you might be interested in the enclosed advertisement. I think it's well put. Only my personal opinion is that when China, England, or someone else gets a sore toe we immediately send Billions. KC's loss alone will reach a Billion, therefore, 25 million will barely pay for all the Brass Hats and red tape we know will follow.

The city isn't much better in the way they're handling things—room for a good reporter here (like yourself) to explode things.

ERNIE TRAMPOSH

(Following is copy from an advertisement in Kansas City newspapers inserted by Milgram Brothers.)

Thank you MR. PRESIDENT for your immediate assistance to our neighbors who were victims of this tragic flood.

MR. PRESIDENT, While there were large losses by industry and business, including ourselves, by far the greater and most tragic losses were suffered by families who through no fault of their own lost their homes, furniture, and everything they possessed. Those of us in industry and business realize more than ever the importance of our fellow workers—for without workers, industries could not function, nor cities prosper. Truly the worker is the backbone of our great nation.

MR. PRESIDENT, We have sent billions to peoples in other lands for rehabilitation, and certainly we have no quarrel about that, but, Mr. President, we should apply the Marshall Plan or the Good Old American Plan to the people in the Heart of America which will enable them to rebuild their homes.

MR. PRESIDENT, What better example can we set than to demonstrate to the people behind the iron curtain that when tragedy befalls our people, irrespective of race, color, or creed, that our government stands ready to assist them.

### U. S. AIR FORCE TO KEEP PEACE IN THE WORLD?

24 Winding Way  
Dayton 9, Ohio

Editor:

Your column on what's ahead for industry was particularly interesting.

The more I think about our present situation, the more convinced I become that this country is entering a situation comparable to that faced in Europe between the end of the Congress of Vienna in 1815 and the start of World War I in 1914.

In other words, a full century of comparative peace was sustained by the might of the British Navy. Might not the same century of comparative peace be in the offing under our leadership. Substitute Air Force for Navy and America for Britain and you have the parallel. We have had our first Viceroy, General MacArthur. Eisenhower is becoming the military leader of Europe or a Military Viceroy.

If we follow the British policy of the last century, we will probably fight more than one Korea. But as the knowledge grows that we will fight and have the power to back up this fighting, might not this act as a deterrent against aggression?

How about looking into this subject for your column? Whether we want it or not, we are now THE world leader. And this responsibility will be ours as far ahead as mortal

men can see. This means a sustained military establishment, certainly. But a military establishment that will be integrated into our civilian economy when our present dislocations are straightened out. And one that will act in the interest of commerce as did the British Navy.

WADE ATKINSON

### "ONE FOOT" "BOTH FEET" TELL INDUSTRY STORY

The D'Olive Co.  
Chicago 3, Ill.

Editor:

I have been more or less on the outside—looking in—on the appliance group for a few years—and reading your books, "One Foot In The Door" and "Both Feet On The Ground" is like attending a meeting of all my old friends.

You have done a wonderful job—and the thing that mystifies me—is where did you find the time to do it?

Looking forward to seeing you soon.

CHARLES D'OLIVE

### SUGGESTS "CAPPY RICKS" STORY FOR SALES TALK

Charles Vodopich  
Refrigeration Service  
Sanford, Florida

Editor:

Re Inside Dope, I always get a big kick out of it. In July issue, attention all subscribers, you are asking for a book that is out of print, Twenty Years of Hus'ling.

If this party wants something for a sales talk, I suggest you go to your public library and get a book entitled *Cappy Ricks Retires*, by Peter B. Kyne.

In this book you will find the story of the Blue Vase. I heard it given one time as a sales talk. If this doesn't meet the gentleman's needs, I can suggest another one.

Good luck and keep them coming.

C. P. HENDERSON

### 3 MORE OF "BOTH FEET"

Long & Long  
Erie, Pa.

Editor:

Please send us three more copies of "Both Feet On The Ground." One of our salesmen says: "It's going to be rough to keep Both Feet On The Ground when there is already One Foot In The Door, but It's A Great Life."

FRANK LONG

### TAKE ACTION OR SUFFER DICTATORSHIP, READER SAYS

Dayton 9, Ohio

Editor:

For many years I have read your paper for news and information covering the refrigeration and air conditioning industry. For this I have been well rewarded. In recent years, and especially months, however, another great service is being rendered to your readers by means of your editorials, comments, and quotations relative to the operation

of our national affairs in Washington, D. C.

To me, this latter service is most essential in helping all who subscribe to sound principles to speak and act accordingly. Action must be taken soon or all industry will be under central authority control which amounts to dictatorship.

J. G. CLARKE

### IF U. P. IS NORTHERN MICHIGAN THEN—OH WELL

570 Madison  
York, Pa.

Editor:

Regarding your July 9, 1951, issue, article on page 8 by C. Dale Merile, am ashamed to think of Michiganders not familiar with the geography of their state.

Where is Northern Michigan? I was born in Northern Michigan and it is some 200 miles north of your story locale, Houghton, Mich., to be exact. This could also be termed *Northwestern Michigan* which is a far cry from your 4th column locale. Next time you're in a gas station ask for a map of Michigan and look for the Northern section of this fair state.

R. W. DEE

Answer: As a native Michigander (born in Detroit as a matter of fact) and a frequent visitor to the Grand Traverse Bay region, I thoroughly appreciate the point you make about "northern" Michigan. I might add that among my friends are our own shop superintendent, my next-door neighbor, and a refrigeration contractor, all of whom hail from the vicinity of Houghton, Mich.

But, may I ask, have you ever heard of the "Upper Peninsula?" That's the way we who live in the "Lower Peninsula" refer to your part of the state.

Newspaper headline writers in Detroit often abbreviate it to "U. P." Seems to me I first encountered this many years ago in a headline that read:

3 DIE, 10 HURT IN  
U. P. TRAIN WRECK

Friend, that was a puzzler. Being interested in railroads as a hobby, I naturally assumed they meant "Union Pacific." Read the article through twice, but the road involved was the D.S.S. & A. Next, I thought maybe it was "United Press," but that didn't make sense either. Finally, came the dawn.

I must confess I've never visited the Upper Peninsula, although I have looked across the Straits of Mackinac to see smoke curling up from chimneys in St. Ignace. There was good reason for that smoke, too. This was late one June, but, Friend, it was cold that day. After all, I was in northern Michigan (well, the northernmost tip of the "lower peninsula," if you insist).

CDM

### "INTERPRETATIONS" HELP

Baltimore Aircoil Co., Inc.  
2519-23 Pennsylvania Ave.  
Baltimore 17, Md.

Editor:

I want to take this opportunity to compliment you on the excellence of the News and particularly the interesting information that it has contained recently concerning various Government orders and restrictions.

R. W. PENTECOST  
General Sales Manager

## Subscribe Now

Receive the greatest trade paper in the Industry—*AIR CONDITIONING & REFRIGERATION NEWS*. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning, home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

Fill in coupon and mail today

**AIR CONDITIONING & REFRIGERATION NEWS**  
450 West Fort Street, Detroit 26, Michigan

Gentlemen: Send the NEWS for one year.

☐ \$5 enclosed ☐ Bill me ☐ Bill the company

Name .....

Company .....

Street .....

City ..... Zone ..... State .....

8-6-51

## WE WILL BUY!

### SURPLUS

REFRIGERATION CONTROLS  
PRESSURE and THERMOSTATIC

ANY QUANTITIES • MUST BE NEW

Write, Phone Or Call For  
IMMEDIATE ACTION

**TRACO Industrial Corp.**

455 W. 19 St., N. Y. 19, WATKINS 4-4302

(Send for Traco's complete list  
of sensational bargains)



### Week of May 1

## MANUFACTURERS' REPRESENTATIVES!

**AIR CONDITIONING & REFRIGERATION NEWS**  
BOX RP-A, 450 W. FORT ST., DETROIT 26, MICHIGAN

A schematic diagram of a vacuum furnace. It shows a main chamber with a heating element (1) and a thermocouple (2). The chamber is connected to a vacuum pump (3) via a valve (4). The heating element is connected to a power source (5) via a switch (6). The thermocouple is connected to a control unit (7) via a cable (8). The control unit is connected to the power source via a cable (9). The chamber is also connected to a gas inlet (10) via a valve (11). The chamber is shown with a cross-section of a sample (12) being heated.

The figure consists of three technical drawings of a bridge structure, labeled 21, 22, and 23.

- 21:** A side elevation of a bridge section. It shows a horizontal beam supported by two vertical columns. The left column is labeled  $K_1$  and the right column is labeled  $K_2$ . The beam is labeled  $L$ . The distance between the columns is labeled  $L$ . The height of the columns is labeled  $H$ .
- 22:** A cross-section of the bridge. It shows a horizontal beam supported by two vertical columns. The left column is labeled  $K_1$  and the right column is labeled  $K_2$ . The beam is labeled  $L$ . The distance between the columns is labeled  $L$ . The height of the columns is labeled  $H$ .
- 23:** A plan view of the bridge. It shows a rectangular structure with a central opening. The left side is labeled  $A$  and the right side is labeled  $B$ . The top side is labeled  $C$  and the bottom side is labeled  $D$ . The central opening is labeled  $E$ . The distance between the left and right sides is labeled  $L$ . The distance between the top and bottom sides is labeled  $H$ .

**ANY QUANTITIES • MUST BE NEW**  
Write, Phone Or Call For  
**IMMEDIATE ACTION**  
**TRACO Industrial Corp.**  
455 W. 19 St., N. Y. 19, WAtkins 4-4302  
(Send for Traco's complete list  
of sensational bargains)

(To Be Continued)

Use Handy Coupon  
on "What's New" Page  
of this issue.  
Use Key No. for fastest service.

## CLASSIFIED ADVERTISING

¼-HP open and sealed type prominent brands condensing units complete; brand

## BUSINESS OPPORTUNITIES

**MISCELLANEOUS**

**NORGE SEALED** units remanufactured and exchanged. Immediate delivery from stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, \$1.15 plus postage.

**MODERN REFRIGERATION CO., Inc.**  
12541 E. McNichols Road, Detroit 5, Michigan.



## CMP Certificates--

(Concluded from Page 1, Column 2)  
under way in the third quarter, but that things should get to working smoothly in the fourth quarter.

Chief criticism of the system is that the CMP certificates for materials don't mean in reality what they're supposed to mean in theory. Says one director of purchases:

"CMP certificates were supposed to be cashier's checks we could turn over to steel and metal suppliers. But it's a mighty funny banking system where you have to run around trying to get your check cashed the way we do. Supposedly there's 'money in the bank' someplace, but just try to find it."

The big metals producers are said to be observing the CMP regulations to the letter, and this makes it important to get authorizations to them as quickly as possible. One large user of metals is said to have special personnel stationed at post offices to nab letters of authorization as soon as they arrive, to expedite getting the metal orders placed.

One firm allegedly has made an arrangement with its local postal authorities to permit one of its employees to help sort the mail, which permits him to keep on the lookout for letters from Washington which contain authorizations for metals. When he finds such a letter he rushes it by special messenger to the firm which then extends it in the fastest way possible to the steel supplier.

## York Sales for 9 Months Increase 22% over '50

YORK, Pa.—York Corp. reported to stockholders that its sales for the nine months ended June 30, 1951, were \$45,730,837 as compared with \$37,368,606 for the similar period a year earlier. This represents an increase of 22%.

New business booked for the same period was \$50,123,411, up 44%. Earnings after taxes amounted to \$2,259,115, an increase of 21%. Income taxes amounting to \$2,661,180 were in excess of earnings after taxes and were 100% greater than in the similar period a year ago.

## Miller Will Represent Arcold In Midwest

DALLAS—F. C. Fallon, president of the newly formed Arcold Co., commercial refrigeration distributorship here, has announced the appointment of J. F. Miller of Elgin, Ill., as midwestern representative.

Miller was formerly associated with the Super-Cold Midwest Co. as general manager, with offices in Chicago.

The Arcold Co. is world-wide distributor of Nolin commercial refrigeration equipment, north Texas distributor of Warren refrigeration products, and Texas, Oklahoma, and Louisiana distributor for Coldin frozen food cases.

Additional lines are expected to be taken on in the near future, according to Fallon.

General offices of the company are at 2823 Main St. and warehouse and service department at 3004 Canton.

## NPA Studies Order To Boost Plumber Supplies

WASHINGTON, D. C.—A proposed order whose objective would be to replenish inventories of brass mill products held by plumbing and heating distributors was discussed recently by the National Production Authority and that group's industry advisory committee.

The order would alleviate a critical inventory situation, it was declared. Distributors would be able to replace their depleted stock of brass mill products for all orders filled. Formerly, they could replenish their inventories only for rated orders.

Many distributors of plumbing and heating equipment to retailers and small jobbers have been faced with the early prospect of having nothing to sell unless these inventories are rebuilt with government assistance.

The order would authorize distributors of brass mill products to place authorized controlled materials orders, within certain limitations, with brass mills to replace their inventories. It would also establish limitations on the required acceptance of such orders by brass mills.

## Atchison Cave, 'Natural Cooler,' To Be Closed As Warehouse

WASHINGTON, D. C.—The Department of Agriculture has decided to discontinue use of the Atchison (Kansas) Cave as a food warehouse, it was reported here.

The former limestone quarry, now being evacuated, is scheduled to be closed down by the end of August and placed on a "standby basis" pending a decision on future use. Only a few dried eggs remained in the Cave and there are no other commodities to store there, according to officials.

Said to have a capacity of 3,000 boxcars, the "natural cooler" has been a federally-sponsored refrigerated warehouse for huge quantities of government-owned and surplus food stocks for more than 10 years. It has been the subject of much controversy since conversion to that use.

A value of more than \$1,000,000 has been placed on the Cave's temperature control system.

## Atlanta Subcontractor Exhibit Dates Changed

WASHINGTON, D. C.—New dates for the subcontractor exhibits to be held in Atlanta have been announced by the Department of Defense.

The exhibit will be staged in Atlanta's Biltmore Auditorium Sept. 10-12. Dates had been announced earlier as Aug. 20-25.

Two other exhibits have also been scheduled. One was held July 30 to Aug. 3 at the Kiel Auditorium, St. Louis; the other Sept. 18-21 at the Hollywood Turf Club, Los Angeles.

More such exhibits are being organized by the Armed Forces Regional Councils, the Defense Department said. The displays enable small businessmen to examine military items or parts for the Army, Navy, and Air Force which they might make under subcontracts.

## Miller To Be Zone Mgr. For Sherer-Gillett

MARSHALL, Mich.—L. O. Bower, vice president, Sherer Gillett Co., has announced appointment of John F. Miller as zone sales manager for the Michigan-Ohio-Indiana territory.



J. F. Miller

Miller recently resigned as vice president and general manager of Super-Cold Midwest Co. of Chicago, a wholly owned subsidiary of Super-Cold Corp. of Los Angeles.

Miller attended Northwestern university, majoring in business administration, later serving as a sales manager for Libby McNeill & Libby and also for the Carnation Co.

During World War II he was in the armed services, being discharged as a captain of infantry after two years spent overseas.

## Acid from Cooling Tower Is Subject of Tulsa Suit

TULSA, Okla.—A Tulsa, Okla. automobile dealer has filed suit against Shoemaker Air Conditioning Co. and British American Oil Co. for \$2,977 in damages allegedly incurred when an air conditioning tower sprayed acids over several cars.

The charges state that the two companies were guilty of negligence in allowing the chemicals to escape.

## Price Controls--

(Concluded from Page 1, Column 4)

Up to now, OPS has been allowing adjustments only for increased labor and materials costs, with cut-off dates earlier in the year.

Wholesalers and retailers, the law says, are entitled to at least their "customary percentage margin of profit over costs of materials during the period from May 24 to June 24, 1950."

It was explained that this did not mean the percentage enjoyed by each individual retailer or wholesaler, but a general average of margins for each group of retailers and wholesalers. Such averages, it was indicated, would be determined by OPS.

Whether or not the "pre-Korean cost plus" features that apply to manufacturers will also apply to wholesalers and retailers was not clear. House Banking Committee Chairman Spence, whose committee initiated the bill, said he thought that they would not apply to wholesalers and retailers. But Rep. Wolcott, a ranking member of the committee, expressed the opinion that the joint Senate-House conferees had intended that they would apply.

Several automobile manufacturers have already applied to the OPS for price increase adjustments based on the provisions of the new law.

In the meantime, OPS revoked its General Overriding Regulation 13 and ordered manufacturers affected by Ceiling Price Regulations 22 and 30 and other manufacturer regulations to start pricing according to the provisions of these regulations before Aug. 13.

## NPA Water Div.--

(Concluded from Page 1, Column 4)

ground and surface water supply, transmission, pumping, treatment, storage, and distribution for domestic and industrial use, and (2) liquid wastes and sewage collection, pumping, treatment, and disposal, whether from domestic or industrial sources.

The division will prepare programs to assure an adequate supply of water and sewage services to support defense and essential civilian activities.

A field staff will not be recruited for the Water Resources Division, Howe emphasized, but instead the Water Resources Division will draw upon the U. S. Geological Survey, U. S. Public Health Service, Housing and Home Finance Agency, and state and local sanitary engineers for information available in those agencies.

## Aluminum, Steel Quotas--

(Concluded from Page 1, Column 2)

materials: 867,000 tons of steel, 49,000,000 lbs. of copper, and 57,000,000 lbs. of aluminum.

DPA said that for maintenance, repair, and operating supplies during the fourth quarter, it is allotting 1,312,150 tons of steel, nearly 27,000,000 lbs. of copper, and about 3,000,000 lbs. of aluminum.

DPA Chief Manly Fleischmann reported that estimated requirements of carbon steel for the fourth quarter have averaged 147% of supply. Demand for copper and copper base alloys is 170% of supply and aluminum demand is 145% of supply.

**BRUNNER**  
SINCE 1906

**REFRIGERATION** helps you serve better

● Customer satisfaction is the only thing and everything a Refrigeration Dealer has to offer...it is his income and business future!

... another good source of store profit is longer lasting, high efficiency

**BRUNNER** SINCE 1906 **REFRIGERATION**

It is the condensing units in your refrigerated store equipment which actually do the work of protecting and selling merchandise. If you can stretch the dollars invested in the purchase, operation and maintenance of these refrigeration condensing units by any given per cent, that becomes added income.

It will take you about one minute to tear out this page section, attach to your card or letterhead, and mail to Brunner.

At your convenience a Brunner Dealer will call and show you the reasons why Brunner Refrigeration Condensing Units could well transfer part of your refrigeration cost to store income.

BRUNNER MANUFACTURING COMPANY, UTICA 1, NEW YORK, U. S. A.

We at Brunner recognize this fact, therefore, have made it our business to help you do a better business. And here is how: By designing and manufacturing refrigeration condensing units which, by every standard of comparison, are second to none. By providing you the customer-serving advantages of a complete range of capacities plus adequate manufacturing facilities to care for your requirements. Supporting you with direct factory help in sales, engineering and installation problems.

Equal in importance to representing a top-demand product is letting the buyer know you are the source of supply.

Brunner's national advertising talks regularly to your own customers and prospects. This year 'round program strengthens your local advertising and sales effort. Inquiries are directed to you...you close the orders.

Write us for Details... on the earning power of a Brunner Dealer Franchise.

Represent Brunner and do a BETTER business

**YOU CAN'T BEAT THE VICTOR Refrigerated Rooms For Every Purpose**

- Normal Temperature Rooms
- Zero, Low Temperature Rooms
- Tailor-made Rooms for any required temperature, of any desired size.

For information write: **VICTOR**

MANUFACTURERS OF THE FAMOUS VICTOR QUICKFREEZE PRODUCTS CORPORATION • HAGERSTOWN, MD.